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RELATION IN ART

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BY THE SAME AUTHOR

THE WAY TO SKETCH

OXFORD: AT THE CLARENDON PRESS

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THE WAY TO SKETCH



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REPRODUCTION OF 'DIRECT CUTTING' IN STONE BY THE AUTHOR

The modern school of sculpture is tending more and more away from impressionistic modelling towards an architectural technique in stone. The stages of clay and plaster interfere with the direct transcription of the artist's thought in the final medium. In this relief the author has aimed at a stylized and flattened result which should harmonize with the geometric surfaces of the surrounding architecture

RELATION IN ART

BEING A SUGGESTED SCHEME OF

ART CRITICISM

With which is incorporated

a sketch of a

HYPOTHETIC PHILOSOPHY OF RELATION

by

VERNON BLAKE

OXFORD UNIVERSITY PRESS

LONDON: HUMPHREY MILFORD

1925

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RELATION IN ART

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ERRATUM

Page 304, line 3 from foot, *for* Stevenson *read* Stephenson

Blake: *Relation in Art*

PREFACE

THE chief aim of this book is to look on the means of plastic expression as a language fitted to express forms of thought. These means are examined and analysed on one side ; on the other the form of thought of different epochs and of different peoples and different artists is discussed and co-ordinated with technical expression. An arbitrary classification is adopted in both cases for clearness of explanation.

This work of co-ordination automatically produces an aesthetic. But an aesthetic unattached to a general philosophy is, if not absurd, at least incomplete. I have thus reversed, in order of conception, the usual method. I have proceeded from an aesthetic to a philosophy, instead of finding place in a philosophy for an aesthetic.

That, starting from an aesthetic standpoint, I should arrive at conclusions more or less in harmony with those of the Principle of Relativity is not surprising ; for a general mental outlook is a function of date ; and at a given moment a same fundamental thought form manifests itself under different aspects in different branches of mental activity. The truth of any philosophical system lies only in the homogeneous relation between its own parts, and its total relation to its epoch.

I would indeed hope in the future for a more co-ordinated and integral outlook not only on the mental activities but on the universe in general. I would wish for less differentiation than we have seen during the last century.

But it must not be thought that this work is only an abstract philosophical one. I have devoted but a part of the first nine chapters to the purely philosophical question. These may be omitted by the reader uniquely interested in artistic criticism. The remainder consists entirely of practical critical examination of artistic technique classified by the nature of thought and expression, rather than chronologically or geographically. For example: I examine the nature of the arrangement of planes, of masses, and that of the surface of a Michael-Angelo figure; I make a similar technical examination of one by Pheidias; I compare the two and discuss the thought differences between the sixteenth Florentine century and the fifth Athenian century, and call attention to the differences of plastic thought rendering that they produce.

I have thought it inadvisable to present this mass of analytical work to the reader without first submitting to him the synthetised key to its co-ordination; though as a matter of fact in my own case the analysis of course preceded the synthesis.

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The chapters which follow this preface were written during the first year of the war. At that moment, having been for long isolated from the scientific world, I was completely ignorant of the existence of the physico-mathematical movement which has since thrown into such full light the names of those admirable workmen, Lorentz, Minkowski and Einstein. It was in 1915 that I submitted my manuscript, already completed, to a mathematician who at once drew my attention to the conclusions, then being perfected, which have been drawn from the electro-dynamic work of Lorentz. I at once procured the necessary books and studied the theories advanced in their pages. It was at this time that I introduced the one or two allusions to the Principle of Relativity to be found in the subsequent pages.

Twenty-two years ago (it was during a voyage to the Far East in 1902) I found myself obliged to recognise what, for want of a better phrase, I will call the absoluteness of relation. From then on, I worked at a comprehension of art viewed from a relative standpoint. This book contains a few of my conclusions. Now that others than I have put forward the doctrine of relativity, two ways are open to me : To write my book afresh—at least in part—making continual reference to these other theories; or to leave my text intact, and to limit myself to indicating, in a summary way, certain differences, certain points of contact between the two positions, and to add certain additional explanations concerning metaphors that I have employed. I have decided on the latter course. Hence this preface. I have only changed the word “relativity” which figured in my manuscript to relation or relatedness, now that the word relativity has acquired a special sense.

First I must warn the reader who is already accustomed to the study of the mathematical Principle of Relativity, that when I give mathematical illustrations of my meaning, such as equations, curves, etc., these *are only used metaphorically*; when I first employed them I was far from suspecting that they could become a possible source of confusion when opposed to real equations bearing their full active quota of mathematical significance. In the works of Mr. Einstein an equation is an equation; it is subsequently completed by an interpretation in terms of non-mathematical thought, to which generally the equation itself has conducted the author; in my pages an equation is but the illustration of a philosophical thought; it is analogous to the triangle so often used by Descartes in a similar way.

This is not the place to explain the theories of the Principle of Relativity; with these I will suppose the reader to

be acquainted, at least in their larger lines. I will content myself with saying that I have followed with unbounded admiration the progress of the learned and ingenious inductions made by Einstein up to the point where, in generalising his theory, he speaks of the "molluscus of reference." From one of his books I copy the following words: "To define time, clocks that go in an absolutely arbitrary way, however irregular it may be, are employed. One imagines each of them to be fixed to a point of the non-rigid frame of reference. The only condition that they fulfil is that the observations made simultaneously on clocks near one another differ only to an infinitesimal degree." It is at the word "simultaneously" that I finally come to pause. What value should I accord to this word? of what idea is it the symbol? I cannot understand it otherwise than as indicating a point in the passage of time where two or several phenomena happen. But what time is here spoken of? It would seem that here Einstein, intentionally or not, places the limits of his relativity, places them upon absolute basis, which is not that of relativity but an absolute absolute, in the classic sense of the phrase. The difficulty is less evident when he presents his fundamental proposition under this more elegant form: "All systems of Gaussian co-ordinates are equivalent for the expression of the general natural laws." But if the difficulty is less patent under this latter form, the reason of it is perhaps more so. Einstein tells us that x_1, x_2, x_3, x_4 , have no immediate physical signification; their only object is to number the points of a continuum, in a determined but arbitrary way. Let us examine this assertion attentively. Between these four quantities there is a bond; this bond is geometric, it is inherent in Gauss's calculations. Where is this geometry placed? if it be not based on a temporo-spatial absolute with reference to which this neo-Gaussian geometry exists.

Why does Einstein stop here? Why is he right in stopping here? Because he is a mathematician, because he puts forward a mathematical theory. Einstein stops at the point beyond which mathematics cannot advance, mathematics at least as we know them at present. Purely relative mathematics are yet to be invented. Will they ever be? I doubt it.

Mathematics are not the only form of mental activity. Besides that form (and besides many others) there is art. This book is little more than an attempt towards an application to artistic phenomena of a more categorical and rigorous analysis than that usually employed in aesthetics. Without compromising truth too much, and speaking figuratively, one might almost say that the substance of this book and the theories of the mathematical relativists come into contact from either side of the four Gaussian co-ordinates. In place of the absolute mathematical basis the aesthete is justified in posing a transcendental hypothesis of an universal relation, and to think in terms of "absolute" relatedness; terms inaccessible to the calculus, but, perhaps, more widespread than may be thought, for in the following pages I put forward the suggestion that it is not otherwise that artistic creators think; or more exactly that it is in a subconscious mental "relative" substratum that artistic creations find their birth. I would examine the nature of this substratum, and the nature of the artistic phenomena that it engenders. That the artist himself, possessor of this active substratum, should not be conscious of its nature is not astonishing. He uses it, he does not analyse it; and when he thinks otherwise than as an artistic creator, he thinks in terms of ordinary thought translatable into words (I mean the usual explanatory word, not the element of a poem; this latter passes, *ipso facto*, into the category of the raw material of artistic expression).

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Perhaps I am in error ; perhaps Einstein has in reality freed himself from all support of the absolute, and thinks as a pure " relativist." It is so difficult to grasp the shades of meaning of another.

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We return to the question : Does or does not the " absolute basis " of the Gaussian co-ordinates perform only the office of " spring-board " to the thinker, which he quits for the freedom of the " pure relatedness " of the four co-ordinates ; or is there indeed no absolute basis to them ? The point is subtle, passes the power of expression, it is a question of a mind form. The ideas put forward, or rather adopted, by Einstein concerning space at the same time limited and unlimited, and figuratively rendered by the " curvature " metaphor—which is nothing else than a relation—would seem to indicate true relativism. We are thus, it seems, led insensibly towards the question examined farther on (pages 58 and 121) of confusion between the " planes of reasoning," between physical and metaphysical reasoning. Perhaps we are here in presence of one of the points of junction.

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Once again, before sending these pages out to the world, I pause and ask myself not so much why I have written them, as whence the ideas expressed in them came to me. Ten years ago, while writing, I could less easily watch myself at work ; the necessary perspective was lacking ; I could less easily stand aside and see in myself but one unit of innumerable others all working towards the establishment of an ever-changing though ever definite equilibrium. " There is but one art," wrote Émile Bernard. His statement was incomplete ; he should have added : but its manifestation is a function of the epoch. So with thought ; so with all human or other effort. The constant is not the effort, the form of

thought ; it is the more complex function which expresses the relation betwixt epoch and manifestation. Thus expressed the variables that we term development and life merge their variability into a constant form.

The de Goncourts classified their enthusiasm for Japanese prints ; but the outlook on the prints was that of the European critic and art lover of the period. With years interest increased in these and other examples of Far Eastern art. Whistler and the Impressionists took from Japan such hints as pleased their occidental minds. Slowly the West became used to the arts of Asia. In Europe Oriental study spread ; and round about 1900 a different kind of aesthetic writing on Asiatic Art came into vogue. Okakura, himself a Japanese, tells us of the ideals of the land that is his own ; and at about the same time the anecdotes and imprecise enthusiasm of the de Goncourts is replaced by the profound examination of Chinese aesthetic philosophy that Raphael Petrucci has given us. We can now understand the vast gulf that, till recently, separated the intentions of our art from those of the art of China.

To what extent do practising artists read works on the aesthetic, or on philosophy ? To a negligible extent I fear. None the less a slow percolation takes place, down from the regions of abstract thought to the definite palette of the painter. The thing is in the air. Though one or two ill-conceived ideas may be all that reach our artist from the detailed work of Petrucci, yet these one or two ideas do reach him ; he employs them concurrently with his own. The complex web of cause and effect defies analysis ; I have even suggested in these pages that it may be futile to attempt to unravel its tissue. The study of Chinese philosophy cannot be held responsible for the modern trend of art.

What I should propose as a more probable proposition is that both, in company with all other forms of human activity, are necessary concomitants of one another during the present age. If this be so, is it astonishing that I should conceive on the one hand a philosophy which postulates the universal permeation of an infinite relational essence ; on the other a reproduction of it in the work of art ? The Laoistic assumption is substantially the same ; I have but used more modern phraseology. Of this, at the time of conception and of writing, I was not so aware as I am to-day. To-day I can look dispassionately back on the former work and see myself inevitably led to conclusions by the impelling force of environment. How far removed are we from mastery even over the birth of our own ideas.

It would be most ungracious to send these pages to the printer without having acknowledged in them the kindness of Mr. Arthur Ellis of the British Museum. Indefatigably has he corrected the manuscript, discussed points of philosophy, brought to the task his extended knowledge of the National Library. A few months back I came, after twenty-five years of almost constant absence, to London, where I knew not and was unknown. Mr. Ellis has proved invaluable.

Nor must I appear thankless to Mr. Alic H. Smith, of New College, Oxford, who first interested himself in the book, and submitted it to the Oxford University Press before my return to England.

LONDON, *August*, 1924.

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<i>Shows Chinese use of interbalanced curves—instead of straight lines—to create stable sculptural equilibrium.</i>	
La Fontaine des Innocents. Paris, Jean Goujon. (Photograph : Mansell) - - - - -	194
<i>Very beautiful examples of the French sense of form. In spite of complexity of movement, the effect is very stable, while the detail of the draperies is well subordinated.</i>	
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<i>Shows beautiful sense of "pattern" decoration combined with tendency towards the right line, the curves of the drawing being exceedingly "elastic," resembling those given by spring steel bent momentarily from the straight. They should be contrasted with those of a drawing by Michael-Angelo.</i>	

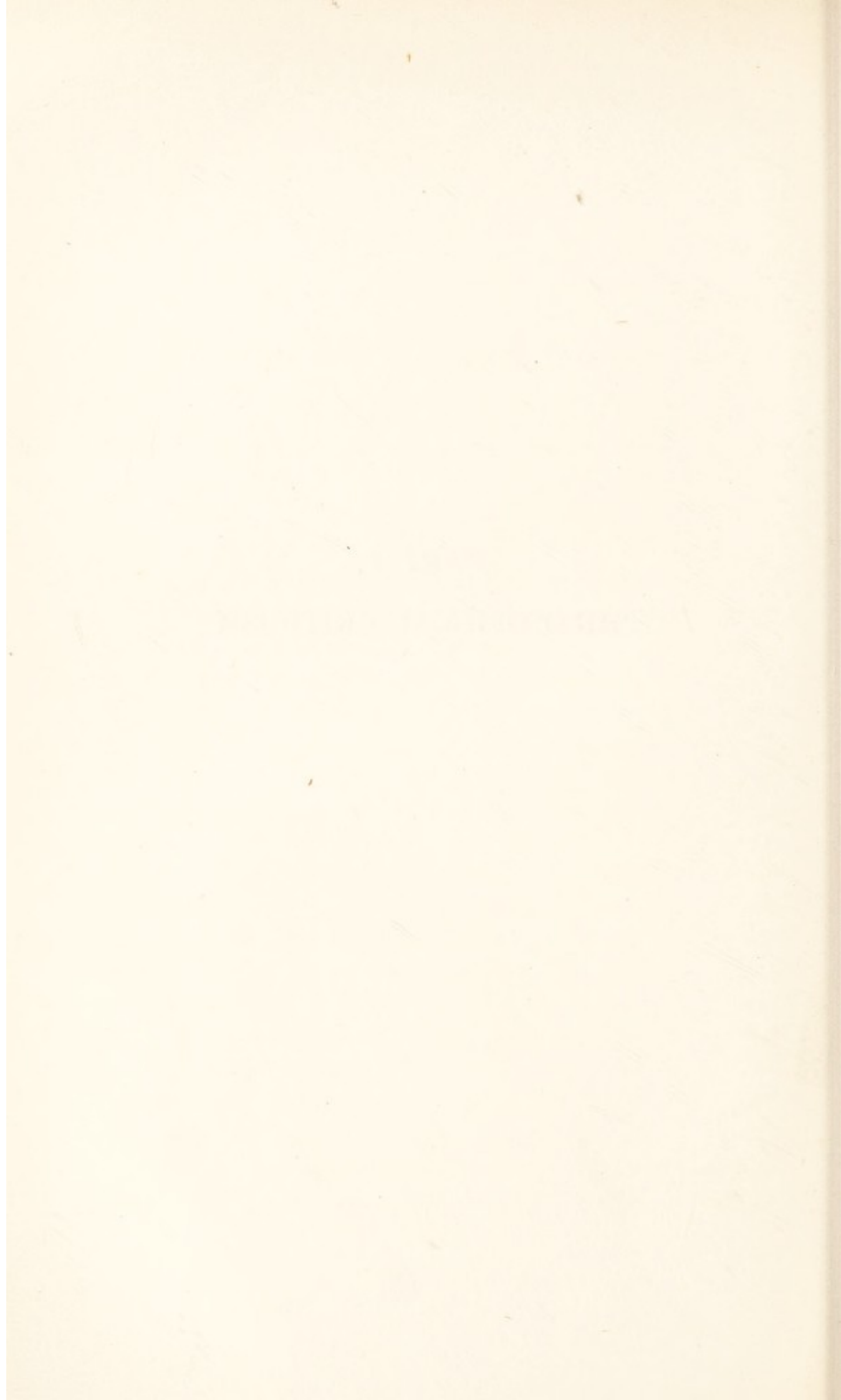
- Le Bois Sacré. Puvis de Chavannes. (Photograph: Johnston) - - - - - 238
Shows the separated groups of figures in a decorative composition spread over a wall surface. Also shows use of different compositional planes parallel to the surface of the wall. All this maintains the "fact" of the wall's existence continually before the spectator. A similar "flattening" is to be seen in the "Dame à la Licorne" (facing p. 244).
- Les Bergers d'Arcadie. Le Poussin. (Photograph: Mansell) - - - - - 240
A most unusual and daring composition. The diagonal of the old man's torso and of the tree trunk is buttressed by the three figures, and crossed by the line running up the front figure's shin continued overhead by the nearly vertical sky limit. Note straightness of shadow on torso. This composition is primarily composed of straight lines; the curves are of very secondary and merely agreeable importance.
- La Dame à la Licorne. Musée de Cluny. (Photograph: Johnston) - - - - - 244
A curious pellucid simplicity is disengaged from the whole, in spite of the complexity of the subordinated detail. Note the masterly equilibrium obtained by decentralizing the Lady, making the Unicorn larger than the Lion whose mass importance is cleverly increased by that of the kneeling figure. Note also the fine curve of the small foreground animals continued behind the figures.
- The Dance. Fresco by Antonio Pollaiuolo. Florence. (Photograph: Mansell) - - - - - 246
Shows complex feeling of composition engendered by irregular shapes. Should be compared with La Dame à la Licorne (facing p. 244), a composition highly simple in spite of all the subordinated additional detail. The evident straight line plays but little part in "The Dance," though many hidden straight lines, on which the principal points of the figures lie, may be traced across the whole group.
- Angel leaves Tobias. Rembrandt (?). Vienna - - - - - 256
Example of a composition in which light and shade plays a preponderant part, in contrast with La Bacchanale of Poussin (facing p. 258). However, the Rembrandt drawing fulfils certain sculptural necessities essential to all great painting.
- Bacchanalian Dance. Le Poussin. National Gallery. (Photograph: Johnston) - - - - - 258
Example of a composition in which light and shade only plays a secondary instead of a primal part as in Rembrandt. The solid and existing forms, even if deprived of the concomitant chiaroscuro, would constitute the composition. It shows again a masterly use of the straight line, the basis of all great occidental work.

- | | FACING PAGE |
|---|-------------|
| Claude Monet's <i>Le Bassin aux Nymphéas</i> . 1900. (Photograph : Durand-Ruel) - - - - - | 286 |
| <i>The deliberate negligence of formal study in this case should be compared with the opposed intention of the Landscape by Cézanne (Plate facing p. 288). Even in the monochrome reproduction, the intense preoccupation of the painter with chromatic representation of transient light effect is evident. The confusion and incompleteness of the technique aid in transmitting the sense of momentary noting.</i> | |
| Landscape by Paul Cézanne. (Photograph : Librairie de France) - - - - - | 288 |
| <i>Shows the architectural stability that Cézanne always introduced into his work. Note columnar feeling of the tree trunks ; technique of foliage insisting on upper and lower sides of leaf masses ; insistence on modelling of ground and horizontal massiveness of walls.</i> | |
| "Sunflowers." By Vincent van Gogh. Tate Gallery, London. (Photograph : Mansell) - - - - - | 300 |
| <i>It is not easy in a monochrome reproduction to point out the more important modifications in the use of colour introduced by Van Gogh. However, on comparing this plate with Plate facing p. 286 (Claude Monet) the negligence by Van Gogh of light effect notation is evident : the vase is practically shadowless, the scheme of values artificialized. Decorative intention outweighs representation.</i> | |



PART I

PHILOSOPHICAL CRITICISM



I

INTRODUCTORY

PHILOSOPHICALLY speaking the problem treated in this book is a psychological one. It may be roughly stated as follows: After an extended examination of art united to many years of practice of it, I find myself—"the self same me" of Browning—according praise to such widely different artistic manifestations as a later water-colour sketch by Turner and the beauty of a black syenite statue chiselled by some long-forgotten Nileside sculptor. Yet the differences between the two works of art are so much more marked than their points of resemblance, that when I commence the list of the latter by saying that both have a connection, more or less distant, with certain visible objects, I am rather at a loss to continue; whereas the list of differences seems to stretch away indefinitely. Evidently I must either assume that my personality is many faceted, made up of Egyptian receptive possibilities side by side with English ones, and thus enables me to receive an aesthetic sensation from very different external impulsions; or—what is more probable—there may be a connection between these apparent dissimilarities through other artistic manifestations intermediate between them. The most cursory examination of the world's art leads me to the second hypothesis. Having already failed to find obvious relations between my statue and my sketch, I decide to make use of systematically applied analysis of the elements

which go to make up the two works of art ; in this I am of course aided by analysis of other intermediate works. Indeed the whole scheme resolves itself into a kind of chemistry. We begin working with many unknowns, sometimes mistaking compounds for single elements, sometimes considering two bodies as quite distinct, until we discover that we are dealing with two salts of one and the same metal. But, as the field of our operations extends, and with it our knowledge, we arrive at more and more plausible and co-ordinate results. By such work we succeed in dividing the complex sensation we feel before a work of art into its, so to say, ingredients ; we see therein just so much indefiniteness of sentiment, and just so much formal expression ; we estimate exactly the rôle the colour plays in setting the artistic sensibility in motion ; and so on.

It seems to me that actual practical exercise of the arts in question is indispensable to a thorough execution of such a programme ; at any rate I myself know the debt that I, as a critic, owe to my own constructive work. When one has painted a landscape from nature, and, returning to the studio, has found it less brilliant in light and colour than a Monet ; when one has then restudied the Monet, and found that he has used such and such a juxtaposition of colour, has equalized or differentiated in just such a way certain values, one is far nearer an understanding of his technique than one would be after days of mere gazing at his canvas. The particularly difficult question of the plastic value of a line would certainly have remained a mystery to me, had I not been able to analyse my own feelings and state of mental concentration, while producing a plastically valid line ; and my sensations (alas too frequent !) when the necessary concentration was impossible to me ; when, as a result, I saw my line develop itself ordinary, flat and unsuggestive of form.

Especially in this last category I trust I may have been able to communicate to others some of the results of the practice it is not given to all to command ; and so to aid a little towards a more general perception and understanding of the manifold beauties and wonders of the world's great plastic masterpieces.

It would be useless and absurd to establish an isolated aesthetic, existing divorced from other theoretical considerations of the universe. An aesthetic conception must be intimately allied to, be homologous with, a conception of the universe of which it is itself a part. Hence the first three chapters deal with a rapid presentation of a general outlook. This summary exposition is very insufficient. Were it elaborated, it is needless to say that it would easily absorb the whole volume ; in its present state it consists of hardly more than a synoptic list of chapter headings.

It will inevitably seem on reading these first chapters that I have brought together a rather miscellaneous and haphazard collection of points. I must beg the readers' patience for the moment ; the reasons for my choice will develop themselves later on. The reasons for each of the twelve axioms of Euclid are not apparent until we have terminated the first book. My first chapter is only a clearing of the ground, a preparation for the particular study which follows, namely : an examination of the essentials of artistic expression, and more especially of those which constitute the plastic arts.

A study both of science and of art created within me a desire to co-ordinate the two ; further, a world-wide examination of the different arts made me wish to try and find a common scheme in which each and every artistic manifestation might find place. Thus, instead of starting from pre-established philosophic postulates, and devoting a subsequent examination—generally a very cursory one—to art, I have

used the artistic perception or sensitiveness as a philosophic instrument : I have been led by artistic considerations to a general philosophy.

It may be objected that I have here to a certain extent reversed the order of proceeding ; that I have begun by presenting some of the inductive and synthetic results and have then treated the analytical examinations which led to them. But a consideration of the impossibility of asking the reader to traverse an immense number of artistic analyses without any clue to their general tendency, will at once justify my choice of method. Indeed to transmit in words the results of each examination demands a primary definition of terms ; which again carries one, by insensible degrees, into a more or less full demonstration of the point of view. The question of the meaning of terms already in use is one of the great difficulties of writing on such a subject ; their paucity is another. Perhaps nowhere else do we find such sad confusion in their use, such lack of definition both of the ideas of which the words are but the audible or visible signs, and such want of strictness in reserving, as far as possible, a single use for each word. This vagueness and confusion may be due to the fact that artistic criticism is almost entirely a child of the last century, and that art during that period was more or less governed by vague ill-defined romantic ideals. Probably for the same reason the aesthetic writings of more absolute and philosophic France betray the same carelessness of exactitude.

Even among artists the comparatively few technical terms that we have are used without precision and in varying senses. The greater part of this book really consists of definitions, more or less elaborate, of what may be meant by particular words. This is of course equivalent to a study of the component elements of works of art ; whatever " inspiration," whatever " message " be embodied in the work is

obviously only transmissible by variations and differing combinations of these elements. When one attempts to comprehend and define what is meant by "artistic interest"—to take one of the many facile phrases in use—one finds one's self led by the eternal enchainment and homogeneity of the universe gradually beyond the actual subject into other fields of thought. It becomes increasingly difficult to reduce the study to manageable size.

In all philosophical problems, if we take the preliminary trouble to clear up the position thoroughly, to be certain of the exact relation between the words we use and the ideas they are supposed to represent, to decide on the exact nature, simplicity and limits of those ideas, and, lastly, to enunciate the problem clearly and precisely, we are often surprised to find that the solution desired is already attained, and that no more work remains to be done.

My present attempt is based upon two hypotheses: the first being an outlook on the universe; the second, the possible point of union between artistic expression and the first supposition. It is needless to say that if these hypotheses are not found to be acceptable this work reduces itself to a mere appreciation, often eulogistic, of works of art. Every philosophy, every science is openly or tacitly based on hypothesis; those I have posed, whatever may seem to be their probability, are at least distinctly stated.

For the reasons above given I am constrained to commence with some purely theoretical and abstract considerations. I have thought it inadvisable to interrupt their sequence by illustrative examples. If my intention should not appear clearly on a first reading, a perusal of the critical analyses which follow, in which, in fact, the theory found its origin, will probably go far in aiding my too summary and insufficient exposition.

It will be noticed that I eschew all considerations of the

question of subjective or objective existence of space, of time, of the universe, as well as estimations of the value of such results as *cogito ergo sum*, or the Kantian hypothesis, that Space and Time are forms of the intellect—the latter indeed Germanically complicates the situation. I assume frankly the non-subjective existence of the universe, only making such reservations as will appear hereafter. But all such ultimate assumptions are purely matters of opinion despite the attempted logic of the roads leading to them. It must also be remembered that the divisions into subjective and objective constitute really a fundamental hypothesis of the Kantian system: they are not an inherent necessity in every philosophical system. A philosophy is a system which follows in logical sequence from "arbitrary hypotheses." If it is good as a system it is good as a philosophy.

I have frequently used the words subjective and objective in my artistic classifications, but it will be remarked that I have not used them in such a fundamental way as Kant did. In fact they might almost be replaced by such terms as *emotional* and *intellectual* or by *intimate* and *external*.

Philosophies are based on logical reasoning. Logic itself, which appears so irresistibly true, may after all be but an artificiality: it is developed in an imaginary and tenuous line isolated, so to speak, in emptiness: it is no more possible than is the existence of the Euclidean line deprived of all width. The natural "logic" of the universe is not limited to a one or two dimensional extent—to pursue the geometric figure: it is indefinitely "synthetic" in its nature. For this reason our brains are incapable of following it. Some times our restricted logic, our restricted mathematics lead us to results which coincide more or less with natural phenomena; perhaps in the same way as the results of a geometer, only acquainted with two dimensions, would coincide with certain facts in the relations between the great circle of

a sphere and that great circle's diameter. Our geometrician would however still be quite incapable of conceiving the relations between a great circle and any other section of the sphere. One might even conceive him as having vague sensations concerning the existence of the third dimension, without the mental capacity to grasp its nature fully and work with it. Such may be our limited and exiguous logic, such may be our mathematics, which lead to correct results only when the circumstances permit, when they are simple enough. Our logic, even inductive, is destructive, in the sense that we unconsciously begin by the artificial isolation of the point studied. This isolation takes place at the moment in which our brain concentrates itself on the matter in hand.

I should perhaps say a word here on the value of truth in hypothesis. Let us put aside the purely metaphysical and insoluble question of what truth really is ; and content ourselves with the vague conception that we have of the meaning of the word. The utility of an hypothesis is by no means measured by the probability of its truth ; indeed by mathematical *reductio ad absurdum* we often make deliberate use of false hypotheses in order to arrive at positive and useful results. It is true that we arrive at our result by showing the hypothesis to be false. However, this simple example by no means ends a subject which has been most ably treated by the late Henri Poincaré in *La Science et l'Hypothèse* (Ernest Flammarion, Paris). Poincaré definitely points out that all we desire in hypothesis is a certain parallelism to a certain similitude with the reality ; but that the number of equally valuable "Parallels" is unlimited. For example, in the chapter on the theories of modern physics he says : "*Mais qu'il y ait entre l'oscillation électrique, le mouvement du pendule et tous les phénomènes périodiques une parenté intime qui correspond à une réalité profonde ; que cette parenté, cette similitude, ou plutôt ce parallélisme se poursuive dans le*

détail; qu'elle soit une conséquence des principes plus généraux, celui de l'énergie et celui de la moindre action; voilà la vérité qui restera toujours la même sous tous les costumes dont nous pourrons juger utile de l'affubler.

“ On a proposé de nombreuses théories de la dispersion; les premières étaient imparfaites et ne contenaient qu'une faible part de vérité. Ensuite est venue celle de Helmholtz; puis on l'a modifiée de diverses manières sur les principes de Maxwell. Mais, chose remarquable, tous les savants qui sont venus après Helmholtz sont arrivés aux mêmes équations, en partant de points de départ en apparence très éloignés. J'oserai dire que ces théories sont toutes vraies à la fois, non seulement parce qu'elles nous font prévoir les mêmes phénomènes, mais parce qu'elles mettent en évidence un rapport vrai, celui de l'absorption et de la dispersion anormale . . . Les hypothèses de ce genre n'ont donc qu'un sens métaphorique. Le savant ne doit pas plus se les interdire, que le poète ne s'interdit les métaphores; mais il doit savoir ce qu'elles valent.”

If I add to the above quotation the following: “ *Maxwell ne donna pas une explication mécanique de l'électricité et du magnétisme; il se borne à démontrer que cette explication est possible. Il montre également que les phénomènes optiques ne sont qu'un cas particulier des phénomènes électro-magnétiques. De toute théorie de l'électricité, on pourra donc déduire immédiatement une théorie de la lumière.*” I shall perhaps have shown with sufficient clearness the position that I myself occupy with regard to the theories advanced in this work; and I shall be absolved from the accusation of inconsistency when I both bring them forward and at the same time announce them to be probably, if not certainly, false.

If a theory enable us to co-ordinate and marshal the seemingly heterogeneous artistic manifestations of different times and peoples; if, as well, it allow us to see possible junctions between art and the rest of the universe, it has

fulfilled its part. I am ready to leave the discussion of its absolute truth to those who are certain of what absolute truth really is.

In the following pages I am conscious of having used at least one very frequently recurring word in a rather ill-defined way: that word is "plastic." Etymologically it would seem that the word should be restricted to matters connected with modelling; for, though the Greeks stretched the metaphoric application of the word to mean any simulation or feigning, I believe they always fell back on *γράφω* for the act of drawing or painting. All the same, it should be remembered that the great difference that we make nowadays between drawing and painting is quite a modern invention due to the use of oil paint, which only came into general use apparently about 1450. Before that date drawing was the all-important thing, the painting amounted to little more than a colouring of a thoroughly conceived and worked out drawing. Effect painting based on study of values, either directly from nature or as a result of nature study, and carried out with a full free brush only dates from the time of Giorgione. However, usage has in every case modified etymology and it has become the custom to call the sister arts of Painting and Sculpture (I am almost inclined to add Drawing as a separate division) the Plastic Arts: though were it not an innovation likely to disconcert rather than aid the reader, as well as being a clumsy phrase, I should almost prefer to call them the Visual Arts: in that case I should reserve the adjective "plastic" for matters not only of form but rather for those occasions when form is the principal and vital expressive medium. Under the actual conditions painting is classed as a plastic art. Now one side of it certainly is; the Greek frescoes for example certainly were. On the other hand recent painting shades off, through regions of nocturnes and light effects, into an almost complete abeyance of form, and of modelling;

not to speak of deliberately flat decorations such as the Greek-key or palmate, for which however a place must be found. We may justify ourselves by saying that a pattern, whether of line or mass of colour or light and shade, is always a use of form ; but I think an Attic Greek would have received but coldly such an extension of his adjective *πλαστικός*. Under the heading of visual art all branches might be satisfactorily grouped and thus distinguished from literary art, and from music ; while the two latter would be clearly separated, in spite of the fact that both use rhythm developed in time. Strictly speaking, we should perhaps use the term " plastic " only with reference to solid sculpture ; but as we must have some word to express that sense of utilisation of solid form that is shown in some drawings, either in the feeling of relief given, or in certain rhythmic modifications of form which are fraught with intention, it seems to me justifiable to accord these meanings to the phrases " plastic form " and " eloquent plastic form " respectively. Nevertheless, having consideration for the wider use of the adjective, I have sometimes spoken of light and shade, and even of colour, as " plastic elements," though logically I should have preferred to designate them by the clumsy combination " visual means of expression."

The word " romantic " will also be found to be used in a much more extensive way than is perhaps usual ; thus I call the inspiration of Michael Angelo " romanticism " but slightly tinged with classic reticence. In fact I call romantic all mind efforts in which the qualities of confusion and envelopment of thought dominate those of clear and measured inspiration expressed by similar means. The self-examination instituted, if not introduced, by Christianity was undoubtedly a great factor in the production of these indeterminate works which seem rather to pose questions than to answer them. Aristophanes was the first to notice

and foresee the new school of inconclusion when, in *The Clouds*, he turns Socrates and Euripides to ridicule.

After mature deliberation I have decided to begin by putting forward the purely abstract philosophical considerations first. This is because I do not see my way to defining, by any other method, both the critical position I take up and the meanings of the general terms I employ. I must thus ask the reader who is only interested in particular art criticism to bear with me through the speculations of the first chapters. These speculations I have cut down as far as possible to a mere sketch production of the system ; and I have restricted its development to that of such general considerations as seem to be absolutely necessary to the understanding of the artistic and aesthetic co-ordinations attempted in the main body of the work. Of such considerations the most philosophically important is this : That a non-subjective view is taken of the existence of the universe. Then a Cartesian distinction is established between the infinite and the indefinite. Here the fundamental aesthetic hypothesis is made, which is : That there are two main directions taken by artistic effort—one may be rapidly designated as a seeking to institute a parallel to the infinite ; the other to the indefinite. However, it must be realised that no hard and fast distinction can be drawn between these two tendencies : the distinction established by the hypothesis is chiefly made in the interest of clear presentation. Indeed such categorical division would be in opposition to the real nature of the integral position advanced.

II

MODES OF THOUGHT

THE desire for knowledge is firmly anchored in the spirit of the human race ; for, whether among the less educated it be called : curiosity, or among the more instructed : science, the difference is but one of degree. When we attempt to understand in some small way the immense co-ordination of phenomena that constitutes the universe, we construct a little co-ordination of our own ; we analyse, we arrange in system and in category. From the infancy of the human race, and among the most primitive peoples, up to our own times and civilization, a love of classification has subsisted ; and to classification we can reduce almost the whole sum of human knowledge.

In the beginning classification was arbitrary, elementary in form ; it was resumed in the few and vague beliefs of the earliest religions. Later and slowly the beginnings of science appeared, as yet feeble and fraught with ignorant dogmatism. Among the Greeks, a measured and ordered people, classification flourished and gained excessive proportions foredoomed to ruin ; built, as it was, on a ground-work so insufficient. It was reserved for the Renaissance to realise the scientific classifications of modern times founded on the more enduring basis of systematic analysis.

For long, even, we may say, to the opening of the twentieth century, the power of science was thought to be limitless ;

her march, slow but continuous, was believed capable of attaining the ultimate mysteries of the universe. Her method was primarily a study of the composing parts of the whole, followed by an arrangement or co-ordination of the facts thus obtained.

From time to time the inductive inspiration of a genius lightened this somewhat arid waste of numberless experimental facts, slowly and painfully collected by workers of secondary value. In the ardour of seeking, comparatively few lingered over the question of the origin of these inductions. They were vaguely supposed to be the product of what is called inductive reasoning. Yet it seems difficult to explain, for instance, the sudden birth of the idea of gravitation and its governing laws in the brain of Newton by a mere reasoning process. Such an idea presents itself to the mind in an *immediate* way ; it is at first scarcely more than the indication of a direction to be followed ; it is incomplete, and without definite final form ; it is scarcely more than a possibility of existence rather than an acquired idea ready for use at once.

Perhaps here we may discern a point of contact between science and art.

The third law of Newton, the discovery of Lavoisier are not truths, except in so much as their own existence is one. They do not correspond to any observable series of facts in nature. They are artificialities, for their exact experimental demonstration a state of things would be needed that has never existed, and that will never exist. Their artificial simplicity presupposes an isolation that we cannot in reality obtain. But are they on this account less admirable ; and in a certain sense of the word, less true ? Are they less inspirations of the human mind ? May they not in this sense be compared with works of art ?

What are, after all, these laws ? Are they other than

attempted reductions of parts of the universe to the scale of our inadequate minds ; little syntheses feebly analogous to integral truth, or truths, too immense, too complex for our understanding ; truths that we shall never understand, for they surpass in extent the capacity of the human mind, which, itself, is a minuscule fragment of the whole it would vainly seek to comprehend.

A work of art too, a statue, a picture, a poem is a synthetic thing, a reduction, so to say, of nature to our limited grasp. Analysis is excellent, the greater part of the progress of human knowledge is due to it ; but like most tools analysis is dangerous, and must be used with care. A chemist decomposes water into its elements ; he studies their properties, and so enlarges his knowledge ; but he must not forget that the properties of water are neither those of hydrogen, nor those of oxygen ; no more are they a simple sum of these properties. The nature of water lies rather in the relation of the two elements, a relation that is born of their chemical association, of a synthesis.

In the same way as scientific research, a work of art is the result of preliminary analysis and subsequent synthesis. In art, as in science, it is incontestable that the more important factor is the synthetic one ; and here we may find the explanation of the popular belief that the scientific brain is insensible to artistic impressions, while the impressionable mind of the painter is ill at ease among the exactitudes of science. The real explanation is probably that scientists gifted with a truly synthetic spirit are rare ; the many are only animated by a love of research and classification. On the other hand, as we shall see later, a great number of those who enroll themselves in the ranks of art are furnished only with a vague and imprecise sensitiveness. In both camps true creators are in the minority. So it is that the two groups tend in opposite directions ; and, consequently, the two subjects

appear contrary in nature and without visible point of junction.¹

The lack of order and precision that one finds in critical works on art doubtless results from this cause. Philosophers have other fields of study. If they consecrate some attention, a chapter, even occasionally a volume, to the study of art, they approach the subject but insufficiently equipped with knowledge of its innumerable manifestations, and of the technical means that are an integral and inseparable part of it. On the other hand artists themselves are too much taken up by the production of their own work ; they are often blind to an ideal different from their own ; and, finally, habit of philosophic research and skilful use of its means are lacking to them, not to mention the difficulty that most plastic artists find in expressing themselves in a medium other than that of colour or of form. The task is assumed by writers. Of necessity they do not possess that intimate acquaintance with the subject that long practice alone allows us to obtain. These are then a few of the causes of the insufficiency of artistic philosophy, and of the literature treating of the plastic arts. We always find praise distributed with a partial hand ; it is always evident that the author ignores a whole branch, if not more, of his subject.

As far as I know no attempt has yet been made to make a complete classification of the different manifestations of the plastic arts that the world has seen. By this I mean a classification based on the technique and spirit of the work, and not on geographical or historical considerations.

Before undertaking such a co-ordination, which is necessarily based on an analysis of the elements composing a work of art, it is evident that we must begin by passing our instruments of analysis in review ; we must then make a list, as exact as possible, of the elements in question ; and,

¹ Another reason is indicated in Chapter V.

finally, we must do what is never done in this subject, we must define the various meanings of the terms that we are going to employ. But to carry out in practice an order, which appears in theory so attractive, is next to impossible for the following reasons.

The elements of geometry are easy to define. To explain what we mean by the word "triangle" does not require a very extended acquaintance with the subject. From distinct and simple elements we proceed to constructions more and more complicated; each new proposition is not so much an isolated thing as an advance depending on what preceded it, on which in turn will depend a new advance. There is no integral total expression possible in geometry. But in the case of art the matter is placed on a different footing; we are accustomed to see the work of art already presented as an integral; we are not accustomed to think in terms of its component elements, though every schoolboy is taught to handle the ideas of straight lines, of circles, or of triangles. In aesthetics the analysis is all to be done; the definitions result from several pages of research, instead of occupying, as in Euclid, an introductory line or two.

A general idea of the nature, extent and limitations of light and shade can only be acquired by an exhaustive examination of painting, no such exhaustive examination is necessary to establish the definition of a circle.

Evidently mathematics is a more absolute science than aesthetics can ever be. In mathematics we deal with the relations of quantities among themselves, which relations are considered apart from any effect they may have on the personality. In art, on the contrary, the established relations are only established in view of this subsequent effect; we have thus introduced into the calculations a quantity, the personality, singularly difficult of appreciation and measurement. However, I find myself more and more inclined to

look on the artistic value of a picture as an absolute thing, capable of acting on two completely receptive personalities in an exactly equal way. The differences of opinion in the matter of the relative value of works of art is due to differences of degree and kind of receptivity in the personalities of the judges. A person blind to, and unreceptive of, the language of form is astonished to hear an unfavourable criticism passed on Titian's *Ufizzi Flora* of which the marvellous melting colour may seem to live, to be the *nec plus ultra* of perfection. Bewildered, naturally not realising the absence in himself of receptivity of a formal kind, he accuses the critic of not "understanding" the canvas, of not seeing in it as much as he, the admirer, does; whereas the critic not only sees all that is there, but regrets the absence of that which is not. He who places his ideal in living representation of life, of character, rendered by a rare mastery of means, listens with ill-concealed scorn to what, for him, is the inapprehension that ventures to suggest that there have been other and higher painters than Velasquez.

In spite of this troubling introduction of an incommensurable quantity it might be possible to build up an abstract theory of aesthetics on purely geometrical lines. We should of course, have to begin by defining the personality; subsequently we should treat it as a variable quantity running through our calculations; at the same time step by step we should combine the essential elements, in ways more and more complex, until we reach the limit of artistic combination. We might, for example, start from such primitive conceptions as the simple juxta-position of two colours. But such a Spinoza-like method would engender exceedingly arid and difficult reading; over and above the fact that the earlier parts would probably prove incomprehensible, until the reader was acquainted with what followed.

We must be content to treat the matter as a whole, and

try to simplify our ideas as we go on, remembering that the greater part of an aesthetic is bound to be analytic, for it treats of an integral synthesis : art itself. However, a small portion of an aesthetic may lay claim to some synthetic quality ; I mean the spirit of integrity that results from an accurate interworking of the hypotheses, which thus form a philosophic whole.

Before commencing a particular study of the plastic arts, it would be perhaps as well to examine a little more attentively a few of the general directions that other forms of thought have taken. Art is a productive effort of the mind ; or, if it be preferred, the result of such an effort. Consequently the study of artistic manifestations must be intimately allied to psychology, both personal and national.

From earliest times man has always shown a desire to explain the ordering of the universe. This was only a natural concomitant of the development of the faculties of imagination, wonder and curiosity. Darwin in *The Descent of Man* quotes from M'Lennan the remark " Some explanation of the phenomena of life a man must feign for himself, and to judge from the universality of it, the simplest hypothesis and the first to occur to men seems to have been that natural phenomena are ascribable to the presence in animals, plants and things, and in forces of nature, of such spirits prompting to action as men are conscious they themselves possess." From such mere superstition ever modified by local influences and those of race, elementary religion was first elaborated ; and then, as the reasoning power increased, a more transcendent metaphysic.

It must not be thought from the above phrases that the following aesthetic considerations depend in any way on evolutionary doctrines beyond the admission of the obvious fact that changes have occurred in the mental position of the various parts of the human race, since we have record of

them. To what exact extent the first efforts of intelligence are due to evolutionary principles of environment, natural selection and the like is a question that in no way affects the conclusions to which I come. I can afford to leave undecided whether we are to believe the seductive story of a terrestrial paradise ; or cry with Lucretius :

Quare etiam atque etiam maternum nomen adepta
Terra tenet merito, quoniam genus ipsa creavit
Humanum, . . .¹

Indeed each view has its corresponding manifestation, and, to estimate the relative values of the latter the critic should, as far as possible, preserve an unbiased outlook on the various casts of the human mind ; he should regard with equal partiality the abstraction of Bramah, the tangible theogony of Greece, and the "nos exaequat victoria coelo"² of its determined enemy.

We must always remember that in such countries as pre-philosophic Greece, or in some Eastern lands, where religion and philosophy are one, untroubled by the scientific element, art, its use, expression by its means, forms a far more integral part of life than it does with us. In modern Europe science tends to pre-eminence ; art takes the position of a pastime ; religion is to a large extent disconnected from other modes of thought. A homogeneity of thought always seems to accompany a great art manifestation ; or perhaps one should reverse the order of the statement. Before the existence of science, as to-day we understand the meaning of the word, it was easier to enjoy a more homogeneous outlook. Art was generally attached, at least in part, to the service of religion. Science is a European conception, natural to the positive and logical mind-form of the west.

¹ Lucretius v. 819. " Thus is the name of mother fitted to the earth, for she created the human race."

² Idem i. 80. " Victory raises us to the level of the gods."

Europe has never risen to the tenuous atmosphere of some of the metaphysical religions of the East, where thought develops on lines unfamiliar to us. In Asia we find things regarded from a different angle, and logical sequence no longer exists, in the complete rigidity that we associate with it. Asia conceives explanatory schemes of the universe very different from those which appeal to western minds, whose only indigenous beliefs—are even they entirely so?—need the tangible footing of a Walhalla, of an Olympus peopled by anthropomorphised, visualised deities. However beautiful in almost uniquely plastic beauty may be the Hellenic Mythos it is profoundly lacking in metaphysic; it dealt rather with things themselves than with their essentials or with their interrelations. In pre-platonic Greece there is only Anaxagoras who allows to thought an existence separate from that of matter, superior to and anterior to the world. For him thought exists alone, and is its own cause. However, he considers the material universe to be eternal; it is ordered but not created by thought.

In a magnificent attempt, Plato was almost the first who sought to escape from the merely material systems of the earlier thinkers, systems which were after all natural to the clear immediate spirits of Greece, agile and joying in the beauty inherent in the outward seeming of things. But Greece had already run her course. The century of Pericles was the last and crowning glory before decline. The immortal work of Greece had already been done; it lay not in the direction of openly, verbally explained metaphysical philosophies or religions; it was more subconscious, more unwitting; was it not for that very reason more inspired and more lasting?

A consequence of this constructive spirit is lamented in able words by Richard Garnett. As it is illustrative of the case I should like to quote the passage at length, especially

as the author limits himself to a statement of the fact, without drawing any conclusions. "While," he tells us, "as a rule it is impossible to speak with too high appreciation of the busy, restless, inquisitive intellect of ancient Greece, there is one point in which it signally disappoints reasonable expectation. It was incurious respecting the literature of foreign nations. The monuments of Egypt excited the wonder of Herodotus; the social conditions of this nation and of Babylonia aroused his intelligent interest; we are infinitely indebted to him for the facts which he has observed and recorded, and if his survey of the history of these countries is inaccurate and uncritical, it at least proves that he deems the subject worthy of his attention. But we should hardly have learned from him that Egypt and Babylonia possessed a literature. If Plato really sought the East in quest of mystic knowledge, his intercourse with the Oriental mind was merely oral. Megasthenes spent years in the industrious investigation of the natural conditions and products of India, but he never gave a thought to Sanskrit, about which the modern Italian traveller, Della Valle, inquired intelligently as soon as he set foot in the country. Some excuse may be made for this want of interest in strange speech and unfamiliar thought; but what can be said of the phenomena of Greeks dwelling for centuries under the dominion of a kindred people, whose language is nearly akin to theirs, whose literature is modelled upon and partly derived from their own, in whose temples they may worship, whose laws they must obey, whose families they instruct, with whose public and private life they are in daily contact, while yet their literature is almost destitute of allusion to any evidence of intellectual life among their rulers, pupils and intimates? Had Greek literature perished, its renown would have left abundant traces in the literature of Rome. If Latin literature had disappeared, we should hardly have

been aware of the loss. How infinitely would our knowledge be extended if Greece had played the part of an active and busy critic, if we had known what a Greek Quintilian thought of a Latin Homer or Thucydides, and been able to read Caesar with the eyes of an Arrian. This strange insensibility is at this day a thing of the past. Every civilised nation now takes a warm interest in the literature of its sister peoples, and each is more or less able to see itself in its literary aspect as it is seen by others."

While drawing attention to this fact, to this absence of desire to criticise analytically the ideas—for literature is only their expression—Garnett seems to fail to see that he is arraigning the very vital quality of the Greeks. What "excuse" is needed "for this want of interest in . . . unfamiliar thought"? Analysis, without which criticism is impossible, may almost be called a Socratic invention. Herodotus found interest in the daily life of the Egyptians because it afforded so much natural material, so many physical phenomena, the collection of which might make up a book destined to afford interesting reading; but thence to slow critical analysis, systematic co-ordination and comparison was a step that the immediate Greek never thought of taking. Had he thought of it, critical examination would probably have appeared to him in the light of a useless waste of time, as indeed it may be, leading only to destruction. The excuse that may to-day be brought forward in favour of critical examination of art is that modern life is so far separated from the ways of beauty, that those few who would follow them are confused, err in the labyrinth of ill-taste and pseudo-artistic manifestations, and so have need of a guide in order to appreciate, even intellectually, that which in fairer times was felt unconsciously by men who lived in constant contact, from earliest childhood, with its manifestations.

This lack of the analytical spirit, this ready acceptance of things at their integral worth, was the reason of the freedom of the Greek religion (and indeed all the indigenous European religions) from metaphysic ; for though, in the course of many centuries, modern scientific analysis was destined to be born in Europe, still, in pre-Christian times, we find but little, if any, sign of such a mental state. When Whewell states that the defect of the science of the Greeks was that though they had in their possession Facts and Ideas, the Ideas were not distinct and appropriate to the Facts, he is drawing a mental position as different as possible from our modern one. That Aristotle should apply purely geometrical ideas (and then vague ones such as that of the circle being constituted by combinations of opposites) to the study of mechanical phenomena appears as incomprehensible to us as does the immediate, clear, unhesitating rhythm of the line of a Greek drawing, free from the Methodic Doubt. Doubt was necessary to call into being the question of the appropriateness of geometrical ideas as explanations of mechanical effects.

The tangible, almost material, nature of indigenous European beliefs saved them from the controversy that has put so many religions in contradiction with their own doctrines ; that has preached charity and persecution at one and the same time. It would be difficult to perceive profound differences of opinion concerning Thor or Dionysos ; their attributes are clear and distinct ; in such beliefs the problems of the universe are not so much explained as merely thrust behind the intervening gods—gods who, in Greece, were themselves bound by inexorable fate. With the exception of a few such gifts as invisibility and power of rapid displacement, the indigenous European gods are merely men. In Europe we never find those fadings of personality, one into the other, which allow the Vedas to declare a god—

especially Agni—to be himself all the others ; transitions which already foreshadowed the later metaphysical conceptions of Brahmah. The natural tendency of the East has ever been towards abstraction, of the West towards the concrete. An unrevealed religion such as Buddhism, the fruit of reflection alone, would have run small chance of success in Europe. The Western is ready to believe revealed accounts of existing though invisible things, but he must be able to have the support of the belief in their veritable existence : such a tenuous basis as the objective projection of abstract thought is repugnant to our minds.

However, the European tendency destined ultimately to produce modern science was already at work, even before the fall of Greece, when we see the inhabitants of Olympus failing to withstand the new analysis ; and among intellectuals a European metaphysic was gradually developing from a reasoning basis that the inevitable Socratic philosophy foreshadowed. A religion was imported from Palestine, from the confines of Asia, and was modified to the local needs : in its doctrines a Plotinus, or a Saint Augustine could find food for their abstract considerations ; while the crowd was attracted by the promise of eternal preservation of the personality to which the Western attaches so much importance.

But the underlying drift of Europe remained unarrested ; a condition anomalous in kind was instituted ; it is not quite foreign to our subject to examine it shortly.

A religion constructed primarily in Asia is transplanted to Europe, where, in the more complex conditions of modern civilisation, it is impossible to observe teachings, originally adapted to a primitive Eastern mode of life, and even there difficult of execution. Consciously or unconsciously religion modified herself to fit with the new environment. But modification alone has proved unequal to the according of analytic

science and many parts of Christian dogma, though it is true that the Semitic cast of mind is less transcendent in tendency than that of India.

Those who have tried to form a union between Science and Christianity generally confound the meanings of the words: theism, and religion. They forget that simple belief in a deity or universal essence does not necessitate the existence of a religion, with its accompanying dogmas, observances, and moral system. Science and religion may be able to find common holding in the most ultimate concepts of that ultimate universal essence or controlling force; but their lines of approach to this final idea are not only different but opposed. We may almost say that the soul of modern scientific research is methodic doubt; we cannot advance till every chance of error has been eliminated by reiterated examination. In religious questions faith is everything; and most religions enclose, in their details, dogmas that the mind of the scientist, accustomed to exact examination, can with difficulty accept.

However wide and unbiased may be our outlook on the various thought manifestations of the world, we have generally an instinctive leaning towards, or prejudice in favour of those occidental ones in whose midst we have, most of us, been brought up and lived. Now the four chief categories of human abstract intellectual effort are Religion, Science, Art, and Philosophy. Of the four Science alone is purely occidental. Philosophy seeks its abstractions in the fields opened up by the other three; it shades off by imperceptible degrees into them, its boundaries are ill-defined. Even the separation of religion from science, and of both from art, is seen to be arbitrary when we undertake an exact determination of the frontiers; but the points of union occur in very remote places, and the subjects remain heterogeneous in nature.

Before entering on the special study of the forms that one

of them, Art, has taken in Europe, it would be as well to review the nature of this homogeneity.

First, then, we have that natural tendency of the occidental mind that led to the elaboration of modern accurate classificatory science. We have in the second place that love of some form of the supernatural, to be found in all human beings, which generally takes a dogmatic line; it but rarely, in some metaphysicians, calls strict reason to its aid. In the West that love is developed only in an appreciative way, and not in a constructive one, as it has been in the East. No European has ever endowed a metaphysical system with the vital force that makes of it a belief, and carries it forth beyond the threshold of the library of the curious. The natural production of Europe was science; it has been an unconscious and perfected development, expressive of the occident. The exotic Christianity has been accepted from without; its teachings come into conflict with the discoveries made by the occidental mind working freely and naturally.

Although, of course, as a matter of history, we may trace certain vague and far distant exotic origins in the third of our categories: Art, yet European Art is essentially a product of the West, and expresses perfectly, in its different schools, the various species of the great family of Western thought. But its way of expression is a tacit one. It is indeed this more subtle manner of the arts that has saved them almost completely from analysis, and critical polemic, till quite recently. It is true that Plato, that Aristotle have written illuminating pages on the subject; that many other philosophers have accorded a perfunctory volume to its examination. None the less these efforts have been relegated to the region of special literature; never did they arouse the interest and sectarianism which sprang from the differences of opinion of Duns Scotus and Thomas Aquinas—to choose at hazard one of the multitudinous examples. This freedom

from the organised criticism that fastened at once on modes of thought expressible in words, has allowed art to develop in a more natural way, sheltered from the extraneous influences of wordy discussion. It is in a way an almost unconscious product of the brain ; not however free—as indeed it could not be—from the secondary influence of the religious or scientific thought that has played its part in forming the artist's personality. It is curious, when we reflect on the feverish application of the scientific method to the classification of all and every subject, that the various manifestations of art should have waited so long for a logical co-ordination.

The logico-scientific way of conceiving is *par excellence* the mode natural to the European. As the only reason for any classification is to render the subject more easy of comprehension, I have chosen to seek for some kind of common factor which may be used to co-ordinate, not only the different forms of art among themselves, but also to attach them to other conceptions, which, as they too find natural place in the mind, must be in some way connected with or allied to our subject. This choice of a conceivable common factor is an application of the logical method ; it is immediately based on hypothesis, and with regard to the value of hypothesis in science I have already quoted Poincaré in the introduction. The line taken in the search for this hypothetical common factor will be briefly traced in the following chapter.

III

UNIVERSAL ANALOGIES

IN the world of science a certain order reigns ; there may be differences of opinion concerning the probability or the method of Evolution ; the learned may be divided concerning the nature of the relations existing between chemical combination and electric phenomena ; but on the whole there is a unity of outlook, which, when we turn to the world of art, is found to be strangely lacking. Here all is confusion and various opinion, indistinct statement and, alas, ignorance.

It is now proposed to see whether, by the use of scientific method, it may not be possible to straighten out the tangle. This is not to confound science with art. We no more reduce vital art to a lifeless thing in so doing, nor take its interest from it, than does the naturalist, by zoological classification, destroy the life and beauty of the animal kingdom. We only call in a convenient aid to study as I have already indicated. The calculus, that invention without which modern mathematics could not exist, is based upon a voluntary error.¹ The unity of a curve is split into arbitrary fragments ; movement is no longer movement when it is

¹ A mathematician of my acquaintance misread my phrase and called my attention to the fact that modern mathematicians do not confuse the idea of the curve and the polygon ; they recognise the "infinitesimal quantity" as a contradiction in terms. That is precisely why I call it a *voluntary* error ; otherwise it would be an involuntary one.

expressed as a differential. Why then do we use the calculus, and its derivative mathematic? Because our brains are totally incapable of dealing directly and in a conscious way with integral phenomena. All science is a similar series of artificial isolations. Even its most general laws, those of Newton for example, are really untrue; action and reaction are never equal and opposed; at best we can say that there is or may be a tendency towards an equal and opposite reaction. The laws suppose an impossible isolation. Many intelligent men of the last century looked forward with profound faith in the future of science; they saw no reason why its wondrous march should be arrested: reiterated experiment, induction from adequate premises, were to have unveiled the secrets of the universe. To-day, among younger thinkers, many are inclined to question the ultimate results of the promising beginning.

Should we then employ means more homogeneous and more integral than the destructive methods used by science? But where should we stop in the immense interweaving of the universe? Carried irresistibly on from relation to relation we should arrive at the whole, at the universe itself. The universe would be its own explanation. The human brain in its minuscule limits refuses the task; the research does not even exist, the chosen road is evidently impracticable.

Let us begin again. While recognising the impossibility of explaining the universe, would it be possible, so to speak, to illustrate the integrity of the universe by an integrity in some distant way allied in its nature to the nature of the universe; of which naturally it would form itself an infinitely small fragment? How does the universe appear to us in the light of modern scientific research, nay to Lucretius, to Epicurus probably, and who knows to what earlier minds? As a vast series of arrangements in which the individuality

of each arrangement may be looked on as the relation between its several parts.

To repeat our chemical figure, the "entity" of water, insomuch as it is not only different from those of hydrogen and oxygen, but also cannot be in any way regarded even as a sum of their natures, must be supposed to lie, in a kind of intermediate way, in the relation established between fixed related qualities of the one and of the other. This abstract intermediate thing which constitutes the "entity" I shall henceforth term: *relation* when it is considered as being the result of the co-ordination of the two or more elements.

But to obtain an effective relation we must do more than juxtapose elements: we must co-ordinate. A mathematical relation may be established between *any* two quantities; a chemical compound can only be made between certain elements in certain proportions. On the physical and phenomenal plane two or more kinds of relatedness are possible; but we are here dealing with what I may term material relatedness, which should only be looked on as an illustration of the metaphysical relatedness which I assume hereafter. A simple relation is never only a pair, it is the establishing of a new thing. The relation expressed mathematically by 3:4 is the same as that expressed by 6:8, yet no one will assert that the pair 3 and 4 is the same as the pair 6 and 8. All perceptions are so many establishing of relations; if we think of the number 100 we are really instituting a measured comparison with the idea of unity; white is only white because there are black and other colours; in our most abstract ideas a necessary element of comparison may be traced. One is then inclined to think that the relation itself is the important thing. The difference between, for example, a chemical compound (*i.e.* a bringing together with consequent marked change of nature) and a fortuitous mixture, may be

conceived to have its root in the total relational nature of the universe.

Returning to our numerical example ; the juxtaposition of the quantities 3 and 4 in the way 3 : 4 gives rise to the single idea of three-four relation. But innumerable relations of quantities will give us the ideas of 3 and 4 ; may we not then replace our two figures by other suitably chosen relations, and so on continuously ? If it be objected that some ultimate fixed quantity or quantities are necessary to close the series of related relations, it might be pointed out that this is equivalent to according a place and nature either to mathematical infinity or to philosophic indefinity. The answer to this will develop itself in the subsequent pages of this book. In the meantime let us suppose that all our perceptions, at least, may be reduced to relations ; whether these relations be on the one hand between material things, which have an apparently real existence ; on the other between forms of thought as distinct from matter ; or whether that which we call thought and that which we call matter be both manifestations of relations established in common but inconceivable substance, only manifested by its relations ; or whether the perceivable universe be but a series of pure relations, are all, perhaps, hypotheses which might be equally upheld, but which are equally impossible of the faintest shadow of proof. My only excuse for here venturing so far into the vague fields of metaphysical speculation is that such ideas owe their origin in my case to an aesthetic source. It was on fully realising the entity of the colour scheme of a picture, an entity composed of many and various parts, that I was led to wonder where this entity precisely lay ; I was inevitably obliged to find that it lay in the particular series of colour relations established. From there it is not a separable step to remark that such a relation constitutes an intelligibly perceptible thing. What I see, understand, remember of

a canvas by Monet is not colours, but colour ; is none of the component parts ; none of the single brush marks or touches of coloured paint ; but a thing different from them ; a colour idea. If on canvas a series of relations may produce a perceivable thing, the question at once presents itself : may not all that we perceive, ourselves included, be of a similar nature ? Science herself seems to me to bring no adequate contradiction to an idea born of aesthetic sensation.

Such conceptions as the Conservation of Energy would lead us to look scientifically on the universe as a vast equilibrium, as indeed the only veritable equilibrium which can be established without making arbitrary isolations, arbitrarily bounded thought-fields. Of course equilibrium in a kinetic but not in a static sense, as is indeed implied in the phrase and idea of the law in question. The real kinetic nature may, however, be paralleled by a static conception, much as an immobile line may be used in graphic kinetics to represent a velocity. A metaphysical analogy (or rather one lying midway between the usually accepted territories of physics and metaphysics) of the law of conservation of energy would be the statement that the universe conserves a constant nature, by an unceasing readjustment of the composing relations in such a way as to regenerate the same resultant relation.

This resultant relation I would term the Infinite. In so doing I have taken a second postulate step.

Movement or change appears to be an inherent necessity. But we are incapable of conceiving it otherwise than in a relative way ; we only conceive it as a continued readjustment of relations. The passage of time is inherent in the idea of change ; we cannot conceive it in any other way than relatively : it may be looked on as a form of interrelation of contiguous relations, which explains why it may be plastically, and of necessity statically, suggested by, for example, the profile of a statue ; that is, by the suitable relations

which go to make up the line in question ; which by a subtlety of their nature bring up an analogy with movement, of which idea the passage of time is an integral part.

As this view of the universe, so far partly developed, had in me an aesthetic origin, I have already been tempted more than once to note, in passing, points of union between such a view and purely artistic questions. Before undertaking a further elaboration of the idea, it will perhaps be as well to pause, and examine a little more closely the more evident points of contact.

A line of a drawing, a verse, a phrase of music, what essentially do they appear to be ? They are simply series of relations. Relations of position in the case of the line ; of both sounds and the ideas expressed by the words composing the verse ; while the phrase of music is evidently neither more nor less than the relative arrangement of its composing individual notes, of course considered in time, so that the silent intervals assume a positive value in the scheme. The concept of time is as much a part of the material with which a musical composer works, as is the spatial concept a part of the painter's material, enabling him to establish relations of position among his colours, and thus to produce a colour idea.

The nature or spirit of the *ensemble* of these relations (or shall we say the *series* itself of the relations ?) constitutes the individuality of the work of art. By individuality I mean the distinctive nature and quality of the work which permeates every part of it. Take a concrete example : there is in every part of a great Greek statue the same quality that governs the arrangement of the whole. This quality is distinctive of the statue, and may be as easily appreciated from a part of the total series of relations, that is from a broken fragment, as from the whole of the relations of the

statue itself ; much as from a few consecutive terms of a mathematical series we can determine the category of the whole series, though we have not got it before our eyes. The homogeneity of quality of expression is one of the attributes of great art. But the question will be studied in its right place.

Now it is evident that a work may be quite homogeneous in its execution and yet shock our artistic sense as being meretricious and superficial ; so, obviously, mere homogeneity of expression is not the only condition to be fulfilled by a successful work of art. It is here that I make my second hypothesis, which is as follows : If the nature or quality of the series of relations be in a smaller—infinately smaller—way analogous to a human conception of the nature of the Infinite (already defined as the nature of the series of relations which is the universe) the work is a true work of art ; its success and greatness will be in direct proportion to the excellence of the above analogy. From this statement the definition of an artist would take some such form as this : An artist is a being capable, first, of perceiving with more or less accuracy the nature of the interrelations of the universe ; and, secondly, of constructing out of the materials of his particular art, a series of relations of an analogous quality. One may here call attention to the fact that resemblance and analogy are by no means synonymous terms. For example, the series 3, 6, 9, does not resemble the series 2, 4, 6, the one being composed of odd and even numbers, the other of only even ones ; the one progresses much more rapidly than the other, etc. Nevertheless both are arithmetical progressions, one with a common difference of 3, the other of 2 ; and are in that way analogous. The progressions 2, 4, 6, and 2, 4, 8, are less analogous, the first being arithmetical the second geometric ; here the analogy is reduced to the fact that they are both progressions. An

Egyptian and a Greek statue do not resemble one another : this is no reason why both should not be, each in its own way, equally " analogous " in spirit to our conception of the Infinite.

But it will be objected that this amounts to an attempted " explanation " both of the universe and of art. Not necessarily ; we may frequently solve mathematical problems by introducing unknown quantities ; which farther on in the operations are eliminated anew.¹ The introduction of the same unknown on both sides of the equation does not invalidate the expressed truth. If we introduce two unknowns, one on each side, we must show that they are equal. In the present case ² we have presented both the universe and

¹ The following simple problem may aid in calling attention to the way in which an unknown may be used in calculation without its real value being ever determined. Every mathematician will remember far better and more abstract examples in the higher mathematics.

An observer wishing to calculate his distance from the place of explosion of a submarine torpedo, counts 10 seconds between the moment he hears the noise of the explosion transmitted by water, and that in which he hears the sound transmitted by air. Taking the velocity of sound in air as 340 metres per second, and in water as 1430 metres per second, determine the distance between the explosion and the observer.

Let t be the time of transmission of the sound in air and t' in water ; the distance being S , we have :

$$t = \frac{S}{340} \quad \text{and} \quad t' = \frac{S}{1430} ;$$

from the problem we have

$$t - t' = 10 \quad \text{or} \quad \frac{S}{340} - \frac{S}{1430} = 10 ;$$

whence
$$S = \frac{10 \cdot 340 \cdot 1430}{1430 - 340} = 4460.5 \text{ metres.}$$

which we have found without ever knowing the values of t and t' ; though, in this case, we can of course calculate them, once we know the value of S .

² We must here leave the convenient illustration of a mathematical equation, and remember that we are only now trying to establish a *similarity* of nature.

the work of art as series of relations. This is a suggestion incapable of proof ; as everything is. If, however, applications of this idea strictly carried out lead to satisfactory results, we may safely accept it as at least a working hypothesis.¹

Now of few things have we a less clear and less absolute conception than of relation : and to call the universe a series of relations is in no way to explain the universe : it is at best but throwing it into a manageable form for our present purpose ; we may almost be said to be expressing both the work of art and the universe in terms of the same unknown.

It is possible to approach the subject from a slightly different angle if we take into consideration some of the more recent results of physical science.² The human mind is curiously constructed ; it is incapable of completely conceiving either continuity or discontinuity ; it is thus intermediate in its comprehension between two apparent antinomies. I say *apparent* antinomies ; for discontinuity would seem to be the base and essential of continuity.

At first glance it would seem that either continuity or discontinuity are equally easy to conceive. Let us consider the first. Take a body moving with a variable velocity. Few will contradict the necessity implied in the statement that if we choose two points in the trajectory, indefinitely near to one another, the mean velocity between them will ultimately not vary appreciably. Or again if we trace a curve it seems quite natural that we should be able to draw a tangent to it ; and moreover, if we consider small enough

¹ "*Ces hypothèses (l'éther et la théorie des ondulations) ne jouent qu'un rôle secondaire. On pourrait les sacrifier ; on ne le fait pas d'ordinaire, parce que l'exposition y perdrait en clarté, mais cette raison est la seule.*" Poincaré, *La science et l'hypothèse*, p. 246. But the book should be read.

² The following considerations, as far as line 32, page 38, were interpolated at a date subsequent to the first writing of the MS.

elements of the curve and the tangent at the place of contact, that the two elements are practically identical. But there is evidently a hiatus in our conceptions; for we are quite incapable of conceiving clearly how and when the two elements of the curve and the tangent cease to be big enough to belong to either, and become the one point which belongs to both. If we imagine a curve in one way it appears to be a continuity and integral; looked at in another way it presents itself to us as a disconnected series of points. The point of junction of the two ideas remains doubtful; they are heterogeneous.

However, this is not quite what is meant by mathematical discontinuity. A regular curve, such as a circle, is an example of a function that may be differentiated; but far from forming the rule in nature, such curves are rare exceptions; if indeed they exist at all otherwise than as our subjective conceptions. What we find in nature is a sea coast to which it is materially impossible to draw a tangent, for the tangent which we should fix at a certain point when it is seen from, say, a balloon, at a height of 10,000 feet will be found not to be a tangent at all when we descend to 100 feet; and again the one fixed at 100 feet would be found to be quite erroneous when closely examined, and when more and more minute variations of directions would be discovered in the coast line the supposed tangent would be found to be even perpendicular to the now apparent contour. The colloidal state of matter, for example, the flocculent precipitate resulting from the addition of salt to a soap solution, might be used as another means of suggesting the mathematical idea of a continuous function which we are unable to differentiate; for however closely we examine the contour of any portion of the precipitate we always remain in complete doubt concerning its exact position. In the same way the trajectory of a particle of matter, imbued with Brownian movement, is

infinitely complex : if we note the particle's position every minute we obtain an inextricable tangle ; but, if increasing the accuracy of our observation, we plot the positions every second, we obtain during each minute as tangled and varied a path as we found before during the hour ; and so on till we reach the limits of human observation.

Yet try as we may we are unable to figure the real ultimate nature of such movement, the changes are so infinitely rapid as to suggest continuity, the continuity so varied as to suggest discontinuity ; we lose sight of the antinomy, and, at the same time, cannot do otherwise than conserve it.

And this after all is a restricted image of the universe. Our difficulties cease when we have made a convention ; traced the Brownian path from 5 or 10 second observations ; or made a map of the sea-coast to such and such a scale. We are free to draw a tangent to our now existing geometric line. May we not in a way look on art as a conventional reduction of the incomprehensible, a substitution of a function which we may differentiate for one which we cannot ; one which reduces the bewildering heterogeneity of nature to a manageable homogeneity ? Each artist chooses the formula which seems to him to be the best approximation, at the same time, to the apparent exterior of natural things and to the intellectually perceived mechanism. It must not be thought that such reasoning is carried out ; it remains of course an almost unconscious function of the personality.

May art not be a sudden cutting of that kind of Gordian conceptional difficulty which presents itself to us when modern atomic mathematics ask us to conceive that the speed of a particle may change from one velocity to another *without passing through the intermediate velocities*, even in an infinitely short space of time.

Before carrying the views already put forward to a more complete stage, and before attempting a closer application

of the more general philosophic ones to our special subject it may be as well rapidly to recapitulate our suppositions.

Bearing in mind that necessity of truth is not a *sine qua non* of hypothetical postulate, but that the only qualities we ask of the latter are a power of reducing the complex to a parallel form comprehensible to us, and generally applicable (the second notion is really implied in the first), we decide to consider the universe as a manifestation of relations. These relations are in constant change among themselves ; but are ruled by, are produced by, or are a resultant relation of an unchanging nature, which is the Infinite ; their nature is inherent in it. The conceptions of time, of space, of matter, are merely relations, established either in some unknowable really existent substance, or in the shape of pure indefinite sequence of themselves. Our difficulty of conceiving time as other than a spatial sequence, of space other than something that thought covers consecutively, *i.e.* in time, of thought otherwise than as a logical concatenation, and really by a spatial figure, or as separate thoughts (again the spatial idea enters, in spite of us, into the idea of a separation) would indicate an intimate union of the three categories, and would seem to suggest a far more common nature than is usually attributed to them. Each of the three seems however to be able to spring from a coexistent potential state or tendency ; that of time being constant in tendency, that of space being more variable in tendency, that of thought most variable.

Having arrived here, we examine art in a very cursory and superficial way. We find that it too is reducible to relations, which work, so to say, among the natural (as distinct from humanly established) relations to produce others, which are the individuality of the work of art. We here make a new hypothesis concerning valid artistic work. Such work is said to be valid when there is analogy between

the nature of the established resulting relation of the work of art and the Infinite.

There still however remain several points which require clearing up. The next chapter will be devoted to the study of some of them, while an attempted justification of the exposition of the relative nature of art runs through the greater part of the book.

IV

THE PERSONALITY

IN a work professedly on aesthetics it may with reason be considered proper to approach all questions, as far as possible, from the artistic side ; therefore I do not hesitate to present the remaining general philosophic considerations from that point of view.

Turning to an examination of the domain of art we are immediately struck with the fact that we appear to be in presence of two very distinct ideals or tendencies. If we apply our hypothesis of "parallelism," we should describe them as follows : I. A class which arrives at its ends by means of a *direct* suggestion of the complexity and mystery of the universe ; that is, of the indefinite extent of the relations. II. A class of a more subtle and purified "parallelism" ; which makes greater use of arrangement, of harmony,¹ of relations between simpler and more carefully chosen elements. This class suggests *indirectly* the resultant of the relations.

But these two classes are only distinct from one another as day is from night. They are united by an intermediate region and thus pass insensibly one into the other. We have here another example of the universal inter-coherence of things, and an example of an arbitrary and artificial

¹ A harmony of a certain kind ; not a harmony tending to unification. But this point will be examined later.

classification, which, though untrue, aids at least in the study of our subject.

Into the second class often fall the arts, which date from before the invention of logical analysis, from before the epoch of modern science. The spirit of this class is integral. The drawing on a Greek vase—of an early period—would present a sample of the second division, and might be contrasted with, say, a landscape by Turner, which would find place among the extreme samples of the first.

Naturally the question will arise: What governs the choice of position in these classes, or rather scale of art? To which we must reply: The personality, or what is the same thing, in a more general form, the nationality.

It is through, or rather by means of, the personality in its actual manifestation that we perceive the universe. My impression of the universe will then be modified by the nature of my personality. What is, or may be, personality?

Evidently here we must make a new hypothesis; taking care however that it should be of a kind homogeneous with our two previous ones.

Apparently personality varies throughout life; yet, at the same time, it retains an underlying principle of similarity. May personality not be in a way analogous to a variable function, to the equation of a curve, whose particular values, which make the curve, are manifested to us (to pursue the figure) by the acts of the person? The form of the function, that is: the true personality, remains constant, and is thus the hidden connecting link between even apparently contradictory manifestations.

A curve may change completely in direction. An epicycloid for example returns on itself, other curves are cusped. An hyperbola after coming from the region of one asymptote, and for long following its general direction, quits it to strive after a second asymptote at right-angles to the first. But the

underlying and generating equation is always the same. To "nationality" a similar theory might be applied.

We should thus be brought to making some such definition of art as the following :

Art is an account of the universe as it is perceived by the particular values, at the time, of the personality of the artist. This account is expressed or transmitted by the relations created by the artist among the elements (form, words, notes, colours, suggested personalities, etc.¹) at his disposal.²

Art is, so to say, a symbol of the universe, or rather a suggestion of the possible essential nature of the universe as it is perceived by the artist. The greater the extent of this perception, the more general in applicability the symbol drawn from it, the greater will be the work of art.

But this last phrase must be modified ; for our only criterion of the matter is human perception. So we are obliged to say that : the more the perception of the artist is in accordance with the highest attained efforts of human perception, the greater will be his work.

An artist being considered as a man gifted with the power of perceiving, more or less, the integral nature of the relations of the universe, but obliged to see them distorted by the imperfect instrument of his personality, the study and classification of works of art resolves itself into a study of personality.

This is the point of junction between art and all other manifestations of human activity.

The varying accounts given of a constant, the Infinite, enable us, when once we possess the key to the language, to

¹ See page 33.

² The latter half of the definition is redundant. It is added for clearness' sake. Art, being itself a part of the universe, is necessarily, according to our fundamental hypothesis, a series of relations, or more strictly the resultant of such a series.

estimate excellently—by comparison—the nature of the personality of the artist; and further, by continued comparison instituted among works of his fellow-countrymen, to arrive at an appreciation of the national personality, by co-ordinating the common qualities. We may thus obtain a series of abstract factors or conceptions, by means of which facts in the histories of peoples may be explained, and even prophetic forecast attempted.

But to do more than simply indicate the existence of this extended application of general ideas acquired by the use of aesthetic sensitiveness would be to pass without the limits of this study.

We are now capable of making a definite distinction between the real work of art and the meretricious work of a clever craftsman. The second is an established series of relations; indeed according to our assumed hypothesis it must be; but the integral nature, the essence of its relations, is not of the same kind as that of the universe; or rather, we should say, parallel to the nature of the universe, and suggestive of it; in other words, is not of a general or universal import. The narrow and the particular mind of the craftsman, who is not an artist, in the higher sense of the word, is incapable of reducing universal perceptions to a manageable form, and of manipulating the universal. It will content itself with simple transcriptions of nature, or will endow them with particular sentiment, and, in doing so, will appeal to the superficial minds which find in such work, a reflection of their own trivial appreciations. At the same time I must not be understood to mean that the valid and general artist is conscious of this "manipulation of the universal." It is an integral factor of his personality, part of the natural development of the latter; it is what is vaguely expressed by the popular phrase "his way of looking at things."

It is in reflecting on the national personality or "equation" that we may understand the variations observed in the aesthetic of a nation throughout the centuries of its life. If we return to our statement concerning personality, and to our equational illustration, we shall easily see that as the variation or curve of personality changes in direction the aesthetic will change ; for the nature of the Infinite is always perceived in a distorted way by or through movements which are manifestations of personality.

On applying a similar idea to the personality of the nation the development of art will seem natural. However, the fundamental spirit which was compared to the generating equation remains the same.

A statue from the Cathedral of Chartres and a canvas by Claude Monet, different as they appear to be, as they are in most ways, are nevertheless both essentially French, they are a production of different manifestations of the same national "equation," which is a sort of statement of the nature of the mean of that group of personal "equations."

This national quality will persistently announce itself as practically constant throughout enormous changes of technique ; which is not surprising if we consider that the technique is only the series of relations chosen by the particular value of the personality of the artist, and, further, that the personality of the artist is a very small element of the particular value of the variation of the national function.

Technique may be changed voluntarily—not, however, without difficulty—but this very manifestation of the desire to change is due to some change of "direction" : the nature of the inevitable distortion is slightly altered. We are not born masters of artistic technique, most of us never attain to it ; it can only be arrived at by long years of study. Now these years of study and extraneous influence modify the artist's perception of the nature of things, or in other words

his personality develops. We observe that the later " styles " of a master are always wider in import as he develops, and more significant than his early work. In widening his perceptions of the universe he chooses widening means of expression.¹

Sometimes we meet with artists whose technical powers outstrip the perceptive powers of their personalities. We are often struck with the fact that their earlier work appears more successful than their later. This is probably due to the fact that the lesser technical powers are more in accord with the less wide outlook. But as the artist broadens his methods by reason of sheer practice and mastery of them, his universal perceptions remain inefficient, remain in a way behind the expression, are incapable of inspiring it. The mechanical, the craft side of the arts of painting and sculpture may be learnt by almost anyone. It will be learnt best by the cleverest craftsman. So it is that many empty and vulgar painters are finer adepts in technique than are some great artists.

Unfortunately the imperceptive eye often fails to estimate rightly the relative values of brilliant, empty execution and of inferior workmanship fraught with intent. In one case the relations, tidy or clever though they may be, are meaningless ; in the other they display the artist's perception, in spite of his want of address. Nevertheless, great artists are generally gifted with masterly technique ; both the relations they establish, and those, more abstract still, that they suggest, are attuned to a great perception of the nature of the universe : the result completely satisfies us. Moreover, the unhesitating certainty of a great mind often allows that

¹ Let me not be understood to mean such obvious changes as, for example, larger or more careless brush handling. I mean deeper qualities of intention. However, wider conceptions are necessarily accompanied by some form of the wider treatment.

easy precision of execution that raises envy in inferior men ; they attempt to rival such well-founded ability by superficial sleight of hand.

To what extent is the perception of the constant nature of the universe a varying perception according as it is related to the underlying "equation" of personality, or to the point reached at the moment in question of its development in time? or, what is the same thing in other words, how much is an artist's universal outlook constant through life; and how much are the apparent changes in its expression but superficial differences, amounting usually to better expression on account of practice? This remains a very moot and delicate point. Perhaps there is renewed reaction by the particular value itself on the constant function, which naturally then ceases to be quite a constant. The idea does not seem wholly improbable and inconsistent with observed facts. It would be a strictly "relative" one.

Personality, then, is looked on as the nature of a relation between relations; or, as we have more conveniently expressed it, as a function of relations. The Infinite is considered as the universal function, of which the perception would be easier to some personal functions than to others, according as their natures are more or less suitable. For the relations co-ordinated in the personal function may be either those that manifest themselves to us in what we call an abstract form, or more simply abstract ideas, or in what we call a concrete form, or concrete ideas.

The artistic personality would belong to the first group; for we must not confound a tangible expression of abstract ideas, as may be a statue, with so-called concrete ways of thinking. The imaginative mind (by which I understand almost the exact opposite from one given to visualising images, as the etymology would suggest) is fraught with a divergent embracing tendency: while the characteristic of the so-called

practical one is a convergence or particularisation, having some definable object always in view.

But it would be well, before developing farther, to establish clearly the hypothesis of universal relation, if so be that the theory be counted of any validity. With a view to classification we begin by co-ordination, in order to co-ordinate we must find a common factor in terms of which we may express all our facts. The choice of this factor is the enunciation of an hypothesis, and an hypothesis is purely metaphorical. We choose relation as common factor, and we attempt to reduce everything to terms of this factor.

We have already employed pictorial and mathematical images to reduce the difficulties inherent in the transmission of abstract ideas ; we will continue to do so, never forgetting that these images are but metaphors, and must be abandoned when we approach the limits of their partial truth and usefulness. The mathematical form under which we study a constant relation is that of the equation. If we consider the function $y = ax^2$ (where x is indefinitely variable) from the philosophic point of view, we find that we are examining several different ideas : we may have the ideas which go to make up those of the variables x and y ; that constant one which is the essence of the equation, and which is identical with that of the parabola ; and lastly, the idea of the developing of the function, so to say, put into action, which action, by instituting a series of points determined by successive co-ordinate values, determines the existence of the curve itself, or the visible manifestation of the abstract relation established in the equation. Having noted the pre-eminent place that relation seems to take in art, and at the same time considering that these relations are the product of one personality, and are perceived by another, I was naturally tempted to try to find some mathematical metaphor for personality.

How does the personality appear to us, if not under the form of a mysterious thing, that is and that is not the same from age to age of life? The "individual" is always there; but the manifestations of the personality change; the acts and tastes of the man are not the same as those of the child; at the same time the former are strangely bound to the latter. May we not see in this a phenomenon similar in some degree to that of the variable function, constant in form, and the changing direction of the curve its manifestation? The personality which persists would be analogous to the equation itself, which is an abstraction and which does not exist, which is only an expressed tendency, which is only an imposed relation. The variables x and y (or rather the successive quantities that they represent) would be the material conditions that are necessary to that manifestation, that is the curve itself; and this curve takes varying directions; now almost horizontal and in rapid curvature, farther on nearly vertical and practically straight, it appears to have completely changed in intention, yet its movements are really governed by the same unchanging equation.

An equation and its manifestation, the curve, can be either simple or complicated. The curve can be a mere straight line, it can be replaced by a surface of indefinite extent and complex curvature. May we not see in this variety of nature a distant analogy with the scale of degrees of instinct and intelligence that we observe among living beings?

I may be accused of classing together, in a way too summary, instinct and intelligence; or rather proposing a common or similar origin for each. It seems to me that, in widely separating them, undue importance has been attributed to certain differences. Spencer and others have called attention to the way in which any frequently repeated intellectually governed act slides imperceptibly into an automatic condition, very difficult to differentiate from an

instinctive act. The birth of a thought is an affair as impossible of analysis as are the instinctive movements of self-preservation, or the unconscious physiologic acts of digestion, or the nervous control of cell formation. All these functions of the body are bettered by use. Evolutionists see in instinct a result of multiplication and co-ordination of reflex actions ; and Darwin states " it is not improbable that there is a certain amount of interference between the development of free intelligence and instinct." At any rate any side of constructive intellectuality may be developed by use, probably by heredity, and certainly by environment ; that is, by the same conditions that are prescribed for the development of instinct or other bodily functions. Why, in a word, should the brain of a mathematician be said to act otherwise than *instinctively* at that first uncertain instant when, without possessing as yet the actual logical steps, he feels himself capable of solving a problem ? Instinct is very difficult to define in such a way as to separate it satisfactorily from intelligence. The danger of analytic classification is often that it raises up artificial problems of separation ; and thus creates difficulties that do not really exist. May not the birth of thought be an instinctive function ; and by degrees, as this instinctive function becomes wider in application, the instincts of co-ordination and categoric reasoning be developed and perfected ? After all why do we accept the truth of a syllogism ? Is it a mere loose using of words to say that we do so " instinctively " ? At any rate it is not possible to study this point to any extent in a work such as the present. I must content myself with hoping that these few indications will be enough to justify my grouping both instinct and intelligence as manifestations of the same metaphoric " personal equation " ; and that we call this manifestation by one or the other name according to its nature, which naturally varies with the nature of the equation.

Thus I intentionally fuse together the ideas of intelligence, of instinct and of personality ; indeed their manifestations seem to me to be so closely allied, that the separation of their essential nature appears not only arbitrary but unnecessary. What constitutes personality if not the general form given to nascent thought which is the " manifestation " of the " equation " ? How does one personality perceive another if not by means of the general tendency of these thoughts and acts ? A considerable part of these is automatic, not to say instinctive ; for example, those dictated by fear in a timorous personality.

The more one reflects on the nature of the intelligence, on that of instinct, and of automatism, the more one becomes aware of the impossibility of clearly defining what we mean by each word ; the more these ideas seem to intercommunicate ; and the more the personality seems to spring from the same source as, and to embrace, the other arbitrary distinctions. In illustration of this we may remember that when one begins to draw from the nude, great application is required ; by distinct efforts the general direction of a profile is determined ; its proportional length is fixed ; its modulations of curve are studied. After many years of practice all these facts are rendered in the incredibly short space of time that it takes for the pencil to traverse the paper rapidly. I can to-day execute a nude drawing in as many minutes as it took me days twenty years ago. In this new capacity how much is due to intention, how much to automatism ? I have often attempted to analyse the mind-working during the production of such a rapid drawing and have always failed. I am conscious of having intellectually determined a certain portion of the work, but much of it I am rather surprised to see on the paper, and I regard the drawing with a certain objective interest, as if it were the production of another person ; for many elements of it are the result of an

unconscious guiding of my hand, and are in a way the fixing and manifestation of a certain moment in the development of my personality. Even admitting the existence of intellectual free-will, only part of the drawing is attributable to that origin ; the rest is an unavoidable transcription of my personality, that no will effort on my part will succeed in eliminating. There would seem to be here an inextricable mixing of intellectual action, automatism, and instinctive movement. It seems to me simpler to regard the whole thing as one coherent phenomenon of the development of the personality, or rather of its manifestation.

V

PERSONALITY AND THE UNIVERSE

FINDING myself thus in the possession of a figurative conception of a coherent personality, it naturally occurred to me to wonder if it were not possible to represent metaphorically the idea of the Infinite as a constant relation between the relations which constitute the perceptible universe. The Infinite would thus be the constant form of the indefinite universe ; it would be the universal equation of which the perceptible universe is the manifestation, as the curve is the visible manifestation of the abstraction that is the equation. It is customary in philosophy to reduce the universe to extension, to thought and to time. One might perhaps argue that the three ideas may have more in common than they are generally supposed to have. It is only by the use of comparisons that we can conceive extension ; we cannot conceive it otherwise than with the aspect of an indefinite series of positions ; and one position only differs from another by the fact that a comparison is instituted between the two, from which a relation results, thus giving a measure of the difference, or why not say the difference itself ?

A thought comes to me ; what is it in its nature ? I find myself incapable of conceiving the existence of a thought pure, isolated and deprived of all element of comparison or of relation. An abstract form of thought, a condition of thought generally applicable exists perhaps ; but I am

unable to conceive it : in spite of me, such a conception is attached to that of the numberless crowd of thoughts that exist, or will exist, and of which it would be the form. Each of the two conceptions only exists on account of the existence of the other ; and moreover behind our idea of the *form* of thought rises the inevitable conception of the universe in which the second conception itself finds place. We fall back again on our intermediate state. Again relation affirms its importance. Every idea is frankly that thing which springs from a relation established between other ideas ; that of the triangle for example is inseparable from those of certain geometrical limitations and conditions, which we cannot eliminate, even when we try to think of a triangle in its most abstract form.

Although we cannot conceive time otherwise than as a succession, that is to say by relations that we represent to ourselves metaphorically clothed in the appearance of a geometrical succession, all the same it would appear that time is more fundamental than either extension or thought. It is for this reason that I feel myself inclined towards the figuring of the nature of time as relation somewhat different from the other two. [The following illustration may give some idea of the metaphorical image that I conceive of time in order to bring it within the limits of the hypothesis. The equation of a parabola exists as an abstraction, although the curve itself be untraced ; according to the numerical values given to the variables, the curve develops itself on one side or the other of the abscissa. I should like to compare time to the concomitant *fact* itself of the development of the universal equation ; and in this way its orientation would be imposed by the nature of this development, which is the perceptible universe. This figure embraces the fact of the impossibility of backward succession in time, for such a negative time would require a new manifestation of the

perceptible universe. But this is possibly only an example of persistent habit on my own part of separation of Time and Space.]¹

We suppose then that the reality that corresponds to our idea of the Infinite may be an universal relation, an equation or constant form of the universe, not forgetting, however, that the idea of *reality* is itself but an idea, perhaps interchangeable with that other idea that is *illusion*. [We look on time as the *fact* itself of the development of this equation towards its manifestation, that we have compared to a curve, and which is the perceptive universe, which in turn is no more than an indefinite series of relations.]² We are struck by the fact that this perceptible universe (or more strictly our perception of this universe, on which we are obliged to base our operations) seems to be divisible into two parts: the animate part with its attributes of thought, of instinct, of personality; and inanimate nature with its attribute of energy. The personality; being a kind of constant form endowed with a certain active forming capacity (once it exists in the perceptible or manifest universe) can direct, to a limited extent, the environing relations; but this directing in reality is only apparent; as it is strictly a part of the integral manifestation of the Infinite. At the same time, but for a somewhat different reason, *if we consider the personality apart from the Infinite* and as already manifest, it has not a completely free field of manifestation. It is, it is true, a form of directing influence; but a resultant directing force is really what comes into action; that is, a resultant

¹ But see the chapter entitled Philosophical Recapitulation. I enclosed this portion in square brackets in 1924 before going to press. This complication of "fact of development" now seems to me to be superfluous.

² I should now write: We look on Time as necessarily coexistent with the other manifestations of the Infinite; it exists by them and they by it, reciprocally and integrally.

composed of the natural direction of the personality and the possible directions limited by contiguous relational influences. The personality may thus be looked on as constant in essence, but its manifestations are not always pure results of this constant variation ; for the existence of all relations is indissolubly interwoven with the existence of all others. Let us pursue the matter a step farther and make use of a new figure, of a new metaphor. Suppose a cannon to be placed in the axis of a narrow and straight ravine sheltered from the wind ; if a shot be fired it will follow a certain path which will result from a formula or equation established on the basis of explosive force, elevation of the barrel and the mass of the projectile. If, however, after fulfilling this pre-ordained trajectory for a certain time, the shell come out of the mouth of the ravine, and suddenly encounter a strong side wind, its path will soon be seriously modified, although it will always preserve in the main its primitive parabolic nature. Here, of course, the trajectory of the shell is taken as symbolic of the manifestation of the personality modified by surrounding conditions. We must not consider the equation as a fact remaining at the cannon's mouth, but as the vital essence of the changing direction of the projectile's path. In this way we have a figure of a true modification or change in the nature of the equation ; for by no equational form, true from the gun's mouth, could one foretell the subsequent lateral divergences ; that new element of variation is only introduced after a certain period of time. In this way may environment by other relations really modify the personal equation ; which, after all, is coherent in its changing form with developing time. Thus the formative influence that dictates the transmission of qualities to offspring would be slightly changed. This would place our theory in accord with that of evolution ; for, as above stated, it would be reasonable to assume a certain similarity of nature

between equations in that way dependent one on the other. The material body of the individual is composed of the relations, that we call matter, maintained in a changing but controlled state of relation by the existence and development of the personal equation, until this latter cease to exist in time ; that is to say till death intervene.

Energy is a quality of the development of the universal equation ; its essence exists potentially in the Infinite, but it is only by virtue of the development of the Infinite that it exists in fact, when it becomes, in terms of our metaphor, a part of the " curve," its presence being manifested to us under the aspect of heat, of electricity and other analogous phenomena. Perhaps we might even be brought to enunciate the celebrated law of the conservation of energy, not with the appearance of a constant sum, but with that of a constant relation maintained between what we perceive as matter and what we perceive as force. In this way the reality expressed by the law would more or less identify itself with the universal equation.¹

We notice another perceived fact requiring a place in our arbitrary classification ; I speak of thought. One might consider thought,² energy, extension and matter as being the co-ordinates or actual values of the variables of the universal equation, always, however, looking on these co-ordinates as relations born of the development of the universal equation. A new system of relations, now established between elements of the manifestation, co-ordinated so as to form a new controlling potentiality would be what I should

¹ A new point of contact might here be established between our theory and certain modern results of mathematical research, which tend to show that mass must not be looked on as a constant, especially when possessed of a velocity whose magnitude is near that of light. I cannot do more here than suggest the idea ; its examination is too foreign to our subject. Later note in 1915.

² See below.

call a personality. It is only as development of the personality that the relations which constitute thought exist: in the Infinite there is only that potentiality which will become thought at certain points of the development of the Infinite; or rather, which would become in the equation of the personality the immediate potentiality to think.

The potentiality of thought plays a large part in the human personal equations, a lesser one in those of animals, a very small or non-existent one in those of plants. The individuality lies in the equation, *is* the equation; the degree of complexity or the nature of the equation constitutes the difference between instinct and intelligence. The development of the personality is naturally a phenomenon of the universal development and is subordinated to it. From time to time the development of the personality is the production of a new series of relations, always between the "elements" of the manifest universe, bound together by a new equation or established formative relation. This is the propagation of the species; for it is rational to assume that these new equations will betray their origin with more or less exactitude.

Free will is a natural and necessary illusion; for the direction that the decision takes is forcibly dictated by the development of the equation of the personality, and so appears voluntary, being the only one possible to the equation whose manifestation the act or the decision *is*; but the nature of the personal equation is a result of the universal development of which it is a part. In this way the results of the seemingly free decisions of the individual take place in the general current which they are incapable of leaving. This explains the unity of development, and the conservation of equilibrium in the life histories of peoples and of the world in general; in spite of the apparent liberty of action on the part of individuals.

Our perceptions are *in* Time, for they come from and depend on the contiguity of the rest of the general development. On the other hand our philosophic or religious conceptions are more dependent on that other fact of the similarity or assimilation of the personality to the Infinite. They are thus in a certain sense outside Time; or at least their potentiality is, although the thought which is the manifestation of that potentiality comes into existence at a given moment, that is to say: is *in* time, which "time" depends partly on that thought for its very existence. The assumption of the separate nature of time and space in ultimate analysis is considerable. The perception of time is not only inseparable from the series of spatial atomic changes that constitute life, but is very variable; it is "longer" to the young than to the aged. The only constant (?) time measures are spatial change perceptions. One is inclined to look on time and space as inseparably co-existent functions of one another and of the observing personality, to look on them as completely coherent necessities.

One might look on the Infinite as *potentiality* of manifestation of an universe. Perhaps the universe remains in the condition of potentiality. Perhaps the potentiality has a kinetic manifestation. One cannot know. But words here cease to have a meaning; because the relations on which their meaning is based are only possible after (again a contradiction in terms) the development of the potentiality. Attention might be drawn to the fact that such a conception of the Infinite hardly differs in ultimate essential from that of the Indian Brahminical philosophy or of the Chinese Tao. However, I believe the Tao to be rather the permeating law of construction, the spirit of things in a differentiated universe, rather than the potentiality of the differentiation itself. The important aim of Chinese art is the expression of the Tao through the perceptible forms of nature. The

analogy to certain fragmentary doctrines of recent occidental art is evident.

In exposing the above hypotheses and their results, the exigencies both of the written form, and of the nature of the ideas usually attached to words as their meanings, have obliged me to adopt this presentation. One must however remember that the whole is so to speak bound together and necessarily simultaneous, if indeed any strict meaning can be attached to this word ; for time would be a potentiality of the infinite, a potentiality which is perhaps nothing else. But words are completely powerless to express such ideas, even supposing that we can definitely formulate them ; for both words and ideas are *in* Time, and express meanings which presuppose its passage. Such hypotheses, I repeat, must only be put forward in the spirit of metaphor ; they must not be looked on otherwise than as a *scheme*, which in reality bears no more relation to the possible than the chemist's suggestive schemed arrangement of carbon and hydrogen atoms, known as the benzene ring, bears to the mobile inflammable liquid we all know. Four assumptions are there piled one on the other (if indeed there be only four) : first it is assumed that there are such things as atoms of hydrogen and of carbon ; then that a molecule of benzene exists ; that in that molecule the atoms may be arranged in a certain way ; and, lastly, that they are arranged in that particular way. If then we remember that other chemical considerations require the carbon atom to have its four valencies arranged in space as the apices of a tetrahedron, we see how far our flat benzene ring is removed from even possible truth. Yet it is an intensely useful supposition, without which a large part of organic chemistry would remain incomprehensible ; without similar ones the whole subject would fall into confusion. Not the least of the uses to which this palpably false, unnatural, rigid hypothesis has

been put is the preparation of new compounds by logical substitution of other elements, by turns, for the hydrogen atoms.

The mathematical reader will probably notice that purely aesthetic considerations have brought me to very much the same outlook as that to which physical and mathematical science has come during the last decade.¹ The manuscript of this chapter was finished—with the exception of course of this addition—before I became acquainted with the recent work of Minkowski, Lorentz, Sir Joseph Larmor and others. I have forborne to make any changes in the ideas advanced here in order to preserve intact in them the results of their aesthetic origin. However, a few lines of intermediate discussion and comparison of results may not be out of place.

It is not only not easy but perhaps impossible to interpret the results of Minkowski's four dimensions calculus into terms of ordinary non-mathematical thought. At any rate words are wanting to express the meaning of mathematical forms "in which we seem to lose sight of the most obvious distinction between time and space as essentially different modes of ordering events." The meaning of the mathematical results is still doubtful, but some such view as the following appears to be indicated.²

An essential part of the practice of the calculus is the final process of interpreting the analytical result in terms of the ordinary modes of thought. It may be remarked in passing, that it may be possible to establish an analogy between the analysis, which lays out the total history of phenomena as an integral whole, and the phenomena themselves. These phenomena have no consciousness of time and space ; such consciousness is the appanage of the human intelligence.

¹ Written in 1915.

² See *The Principle of Relativity*, E. Cunningham, 1914.

The laws of natural phenomena—*e.g.* when expressed by means of a principle of least action—consist in a relation between the whole aggregate of configurations which the history of the phenomena contains. In such a history the past and future, being mechanically determinate, are interchangeable. Such a view is, of course, a mechanical determinism. As a mental position it would only be completely realisable by an intelligence capable of comprehending the whole of time and space at one glance.

But the limitations of the human mind necessitate the resolution of this changeless whole into temporal and spatial aspects. The past and future of the physical world are the past and future of the intelligence perceiving it.

Time can only be a meaningless term to a being outside the physical universe, and free from participation in its phenomena.

The human consciousness and the physical universe are inseparable parts of a greater whole; in which they are, in a certain sense, parallel to one another. By reason of its nature the brain cannot do otherwise than marshal physical events according to the sequence of its own inner consciousness and relatively to that sequence. By this process of correlation an analytical scheme of relations is constructed for the description of natural processes. When this has been done the analytical scheme contains the *whole history of these processes*: the mind may thus grasp them as a whole. The act of formulating a set of equations, which make the present state of a system contain, implicitly, its whole past and future history, practically eliminates time—a product of the human consciousness—from physical relations.

In restoring time and space to their lawful position as factors in human consciousness, the Principle of Relativity is preserving the true nature of physical theory as the description of facts in their mutual perceptual relations, and not in

relation to a metaphysical (psychological?—V.B.) background.

It will be noticed that in the above rapid review of a modern scientific position there is no point absolutely at variance with the hypotheses advanced in these pages; for whether one speak of Time as being the fact of the development of the Infinite, or whether one speak of its being a meaningless term to a being outside the physical universe, the idea that time is not absolutely a necessary existence is one and the same.¹ Such a view is not identical with the Kantian one, an essentially subjective one as we should presuppose of a Germanic philosophy, and especially of one dating from the beginning of the romantic movement. To Kant Time is purely subjective, "in us" in the words of the classic phrase; whereas in the four dimension calculus we only "lose sight of the obvious distinctions between time and space as *essentially different* modes of ordering events" (the italics are mine). This is why the sentence "Time can only be a meaningless term to a being outside the physical universe, and free from participation in its phenomena," seems to me hardly an accurate presentation of the idea; for in no sense would the fact of Time be meaningless to such a being, only it might not have the same "obvious distinctions" from the other manifestations of the universe, for example space, as those we conceive it to have.

The four dimension calculus would seem to be another step, as Mr. Cunningham rightly observes, towards the elimination of the subjective in physics; and one might add that, as such, it takes its place in the general tendency of to-day towards a more objective point of view, both in philosophy and in art. It would seem to be, if such an expression be permitted in a merely metaphoric sense, a new approach to the mode of thought (the phrase is ridiculous)

¹ See "Philosophical Recapitulation," and notes to p. 55.

of the Infinite, which contains the essence, or rather which *is* the essence of all different manifestations before they become different. When considered in this way the four dimension calculus appears to me to be in close harmony with the manifestations of art, which I have hypothetically classed as objective; and to be the converse of subjective and romantic manifestations. It is in direct contradiction with the instability of Bergsonian philosophy; unless this be content to take a lower place as mere description of the appearance of things to us, after time has been endowed by us with its particular differentiation from other universal manifestations.

VI

INTRODUCING ART CRITICISM

I HAVE elsewhere stated that it was before an archaic Greek torso, while I was considering the rhythmic movement of the loose edge of the peplos, that the question whether time and space are essentially different presented itself to me.¹ This timeless spatial line gave me such an intense feeling of rhythm, which is nothing else but relations in time, that the only plausible explanation I could find was to suppose that the line expressed in some way a state in which the essential difference between the two no longer existed ; in other words, that the line was an immeasurably feeble expression of the Infinite. It was but a step farther to suppose that all kinds of suitably established relations would be capable of containing or transmitting universal suggestion, by the self-same fact of their being expressions of the Infinite. Indeed if one think a moment there seems to be a greater rapidity (time) of transition from tint to tint in one colour scheme than in another ; or even such variety may be noticed between different parts of the same picture, just as the velocity of my peplos line seemed to vary along its exquisite length. Combining this observation with those that I had already made on the relative nature of colour, I was induced to consider a work of art as being nothing more than a certain co-ordination of relations organised by the personality ;

¹ See Plate facing p. 66.

the quality or individuality of the work lying in the nature of the arbitrary co-ordination, which is an unseizable relation of the same class or level as the simple idea. The work of art may be likened to an inexhaustible store of latent energy capable of producing a constant effect on an unlimited number of attuned personalities.

We have already postulated two things : Parallelism with the Infinite as a measure of the value of a work of art ; and : The two ways of perceiving the essential of the universe : (a) one perceives it as an indefinite extent of relations : the artists of this class will choose a direct suggestion of the complexity of their subject as a means of expressing the manifold character of the universe, and thus in a secondary way, will hint at, or kindle the idea of the Infinite ; (b) the other proceeds by more simple, unhesitating means : by greater use of choice and arrangement it strikes straight at an intuitive vision of the abstract possibilities of the Infinite itself.

Of these two brain-forms the second seems, *prima facie*, by an apparent contradiction to be the more metaphysically inclined. But a moment's attentive reflection will show that the analytic mind that rejoices in the study of detail is nearly allied to the one that undertakes the series of examination and co-ordination from which results a philosophical metaphysic. The more immediate nature of other peoples, as, for instance, of the earlier Greeks, contents itself with a more summary and unhesitating method, instinctively general and applicable, created without the aid of mediate reason. In Shakespeare we may find instances of most things—the mine is inexhaustible ; but the form of the dialogues of Aeschylus is their claim to our attention : it is in the form that must be sought their correlation with the Infinite. Shakespeare, like Turner, widely differing as they do on other points, counts on the bewildering multitude of equivocal effort ; the Greek on the studied relation of clear and



ARCHAIC GREEK TORSO FROM XANTHUS.
(Brit. Mus.)

*Shows delicate rhythmic drawing of the folds at peplos edge
below breasts*



simple thought to thought. But hard on Aeschylus came Euripides, a contemporary of Socrates; intentional psychology, analytic examination was born; the immediate integral in art and thought was doomed; and soon Aristotle was to see the need of scientific experiment and classification. Euripides makes abuse of vague sentiment. The mystery of Rembrandtesque light and shade is destined, already, to supplant, with its lost and doubtful outlines, its uncertain complex expression, the clear unmistakable juxtaposition of white and black upon an early Attic vase. The thought movement that we have lately seen developed to its full in the philosophy of Bergson was begun.¹

However enticing may be such scientific philosophies of change and of the relative, they take but little or no account of a good half of the artistic phenomenon, of the half that is employed in general suggestion by formal static means: which seems after all to be the most enduring: which remains eloquent, as it does, across centuries of types of thought undreamt of when it was conceived. Bergson seems to sum up art in the methods of Turner and Corot. Spencer does even better, he appears to ignore it altogether. German thinkers, who have studied Greek art, find in its general expression what it pleases them to find, and they seem to overlook the fact that they study the effect of a Greek statue on the German mind rather than the Greek statue's entity.

Pater, writing an appreciation of Coleridge, says "What then, is the essence of his philosophy of art—of imaginative production? Generally it may be described as an attempt

¹ In the less changeful East, China has shown us a crafty welding of the two; a clear expressive form, though not so pure, so springing, so joyous as that of Greece, is not unmixed with other elements of imprecision and of mystery; figures are no longer mere plastic material for the artist: they have personalities, and are in essence composite. The relation of the Tao to art should be studied.

to reclaim the world of art as a world of fixed laws, to show that the creative activity of genius and the simplest act of thought are but higher and lower products of the laws of a universal logic." May not this desire for the integral, for the absolute, have been, in part at least, the outcome of Coleridge's early and severe classic training? Speaking of his master he says: "He early moulded my taste to the preference of Demosthenes to Cicero, of Homer and Theocritus to Virgil, and again of Virgil to Ovid. He habituated me to compare Lucretius, Terence . . . not only with the Roman poets of the, so-called, silver and brazen ages; but with even those of the Augustan era . . . I learned from him that poetry, even of the loftiest and seemingly wildest odes, had a logic of its own, as severe as that of science; and more difficult, because more subtle, more complex, and dependent on more and more fugitive causes."¹ But the views of Coleridge were confused by the then novel obscurities of German metaphysics. Did he not himself write metaphorically of "the first range of hills, that encircles the scanty vale of human life . . . its higher ascents are too often hidden by mists and clouds from uncultivated swamps, which few have courage or curiosity to penetrate"? He lived among the beginnings of modern empirical science under whose reign "nothing is, or can be, rightly known, except relatively² and under conditions." So, distraught by the new and revolutionary study of nature, submitting unwillingly to its dictates, he strives to anchor himself to "those older methods of philosophic enquiry" of the 17th and 18th centuries which, at least in their attempts to establish an absolute, resemble distantly their Hellene ancestors. Since the time of Coleridge a century has passed; inter-relation in thought has

¹ *Biographia Literaria*, chap. i.

² The great distance between the meaning of this phrase and that of the apparently similar modern one should be dwelt on,

become natural and inevitable. Yet it, too, even as its predecessors, fails to satisfy entirely: and, in this beginning of the 20th century, a new desire for something more absolute is felt. The difficulty before both philosopher and artist is great, two seeming contradictions must be allied, analysis must join with synthesis, the absolute must be suggested by the relative; a just medium must be struck between conclusiveness and inconclusion. The Greek statue was conclusive; the Turner water-colour is continuous. Both have been done; both have directly or indirectly influenced our mind formation; to deny either would be folly. Bergson claims to have refuted Zeno; by the very fact of having made the claim, Bergson steps into the past and takes place beside the static mentalities he wars on. The ever-fleeting half-perceived mystery, generated one knows not how by the "Ancient Mariner," satisfies us no longer. That endless, ingenious, heterogeneous agglomeration of psychologic delvings that was the "Ring and the Book" becomes unreadable, and perhaps Stevenson's saying that it was the greatest book of the 19th century contains more of truth than its author meant: truly it was of the 19th century, but hardly for all time. One would like to quote at length, were it not so well known, "Old Pictures in Florence"; so excellent an example is it of the belief in inconclusive art, and of an almost wilful blindness to the magnificent abstract intention of Greek art:

"And paint man man, whatever the issue!

.
To bring the invisible full into play!
Let the visible go to the dogs—What matters?"

It is true that he puts the phrase into the mouth of an imaginary quattroceto painter: and that the previous;

. . . Soul (which limbs betoken)
And Limbs (Soul informs) made new in marble

slightly modify the situation when he, Browning himself, speaks. Nevertheless the main note is struck; the very confusion of the poem itself shows inapprehensiveness of the eloquence of pure form; shows that willingness to count excessively on the co-operation of the sentiments of the spectator, which has had such a baneful influence on art; and has encouraged the publication of the incomplete, that relies on the mind of the spectator to fill up the gaps.¹

With the pendulum swing that retains all things within just limits, the beginning of the 20th century has turned back from the vague romantic sensational art (among whose first prophets were Diderot and Rousseau), that ran riot during the 19th, and a return to the absolute is strongly marked.² To what exact degree of success it is destined still remains problematic. Till now it has been but feebly successful by reason of the ignorance of its exponents, not only, in the case of painting, of form and colour, but also of the technical ability to render pictorial ideas in them. Every antique or mediaeval artist learnt technique as a matter of course, learnt it during an apprenticeship that nothing can replace.

¹ Gaps in conception. Interval may be used as a definite aesthetic factor.

² Since this was written in 1914 the tendency has become an accomplished fact (1924).

VII

BEAUTY AND FITNESS

IF we have at least two classes of artistic production which, though inseparably united through a graduated juncture, nevertheless employ different methods of execution, if these two classes do not aim at quite the same end, we are at once called on to ask what we mean by " beauty " in a work of art.

Considering for the time being visible beauty alone, and remembering our postulation of the objective existence of the universe, we find ourselves justified in considering as separately conditioned : (a) the beauty of nature ; and (b) the beauty created by the human brain. The latter is artistic beauty, the subject matter, in part, of this book.

The subjective metaphysician will object that beauty has no real existence, but is imposed on nature by the human intellect. It may also be objected that the division above suggested is arbitrary, for the human brain is a natural phenomenon of the universe, as is also an idea produced from the mind. Certainly ; but this is closing the door to a useful classification, to one which is essential to our present attempt at co-ordination. We take then the point of view that art is created by man as a parallel to the universal idea, always remembering that art, if we reason in terms of our hypothesis, is really contained in the Universal.

The more we examine the manifestations of visual beauty the more we find a proportional connection between our

idea of equilibrium and our idea of beauty. We have already postulated the parallel between artistic relation and the universal relation. But it is impossible to separate the idea of universal relation from the idea of equilibrium. Hence we may find in the kind and degree of the balance of a work of art a measure and a means of classification of its beauty. At the same time, if we examine those natural manifestations that men agree to call beautiful, we find in them differing degrees and kinds of balance of colour or of form.

Whether the ideas of beauty and of equilibrium are really identical, or merely concomitant, is a question that reduces itself to that of explanation of fundamental ideas. And all explanation of fundamental ideas is illusory; it is never more than a restatement of the question in other terms.

Now it is more or less easy to institute comparisons between different kinds of plastic equilibrium; ¹ its degree of perfection is more or less measurable. We will then use it as a kind of co-variable with beauty, and see if its use in this way leads us to satisfactory results.

Perhaps we shall be justified in looking for convenience on all forms of beauty, whether created by an artist or not, as divisible roughly into two parts, calling the one parallel to the indefinite, the other parallel to the Infinite, remembering, however, the continuity of the two forms and their real inseparability. Everywhere we find the two present in varying quantities; the first would dominate in the confused tangled beauty of a hedgerow; the second in the sculptural, pure and sweeping line of some mountain side. Our distinction has only the value that has any other arbitrary hypothesis; namely, an utilitarian one. For it is easy to see that it is purely subjective; indeed the hedgerow's confusion is

¹ The word equilibrium must be taken in its largest possible sense. Its use in this book will become evident as the reader proceeds.

really made up of a multitude of more precise forms that would naturally fall into the second category. It is only the point of view taken which decides the case. But the artist takes a point of view. The matter seems to reduce itself to this : that every balanced portion of the universe, if regarded in a suitable way, is capable of directly suggesting the Infinite; though regarded in another way, or by another kind of intelligence, it will suggest the indefinite, and only perhaps subsequently the Infinite. For example, the unordered confusion of plants may afford subject matter for a picture by an indefinite artist : while the same confusion simplified may become part of an integral expression adapted to wider, more general art uses. It is the artist's personality which decides on the choice of material ; and decides the kind of necessary distortion that the *real* universe shall submit to. Thus of two artists painting from the same model, one will fix with avidity on details of the form ; the other, discarding them, brings all to one general formula of simplicity. One will exaggerate the passages of tone that pass from the figure to the background, the other will cut the model as clear as possible from its surroundings. The first painter would fall into our first category, that is, of those who arrive at their ends by means of a direct suggestion of the complexity and mystery of the universe, or of the indefinite extent of its relation. The second would belong to those who use a more subtle and purified parallelism, one which makes a greater use of arrangement, a greater use of eloquent harmonies, established among simpler and more carefully chosen elements. Those artists who seek to advance towards the unknowable through the complexity and indefiniteness of the universe naturally find material to hand more easily than those who exercise a rigorously controlled choice over their matter, and combine fewer carefully chosen elements into a synthetised and expressive whole.

Limitless as the universe appears to be when considered as a reservoir from which the artist may draw his material, permeated everywhere, as it seems to be, by the same characteristics, we find none the less in practice that the possible artistic uses of some parts of it are restricted. The doctrine so rife some years ago of beauty everywhere was undoubtedly based on a confused perception of the underlying truth that I have expressed in the language of the present hypothesis by saying that in every fragment of the universe some equilibrium of relations is to be found. But let it not be thought that all this material is fitted to artistic use. Though it may be possible to produce a work of art using as a base the most unpromising fragment, it must not be thought that the higher levels of artistic expression can be reached by this means. The most amorphous lump of mud indubitably possesses arrangements and harmonies of colour—to speak of them alone—which would defy the most skilful brush; yet it may not be suitable as subject matter for a picture, any more than some of the literary subjects of Zola are fit matter for attaining to the ultimate peaks of literature.

At the same time what would appear at first to present itself as a totally different problem is really a very similar one; I speak of the case of an extensive stretch of country of which the equilibrium is only completed by movements of form so vast that it is impossible, at one glance, to enclose them in the frame which is inevitable to all works of art. The lack of terminated balance of form, in the necessarily restricted portion of nature that is used, will be the cause of a lack of balance in the repetition on the canvas. If, however, nature only be used as a suggestive source of inspiration, and not as a subject to be portrayed, the difficulty may in this case be overcome. Few countries are less “paintable” than the valley of the Arno; yet the spirit of those Tuscan hills inspired one of the most notable manifestations of art,

and its effect may be traced throughout the frescoes of Renaissance Florence. On the other hand, the lump of mud is insufficiently provided with necessary artistic elements of form of a defined nature, of colour sufficiently varied, to supply the artist with ingredients of his work in such quantities as would allow him to construct a series of relations fulfilling the condition of universal parallelism ; but in the Tuscan landscape the elements, though there, are so distributed as to require rearrangement before they may be reduced to manageable dimensions.

Though every balanced portion of the universe *may* be capable of suggesting the Infinite to the human intelligence, it does not follow that all portions are equally capable. Hence we see how it is possible to say that things are more or less beautiful. Indeed, could we conceive a state in which everything should be equally suggestive—that is, equally beautiful—the inhabitants would have no idea of beauty for lack of an element of comparison. If the relations established by all possible co-ordinations were analogous to the integral relation, the supposed state might necessarily not exist, as its very existence *is* the variety of relations ; though the fact that equality of degree of analogy does not necessitate complete equality of nature of the relations might save the situation ; but such discussion is idle. The question of degree both in natural and artistic beauty—to continue the assumption of their separate, objective existence—is paramount. Here, as everywhere, comparison is necessarily made either openly or unconsciously.

We have then hypothetically established the sense of equilibrium, either as being identical with the sense of beauty, or as a proportional concomitant of it. Here of course we must understand the word equilibrium in its widest sense ; we must extend its application beyond the usual limit (when it is applied to forces) ; we must apply it to form, and to

colour. A delicate equilibrium is established between the colour of a shadow and that of the contingent light. This equilibrium or static relation we cannot transfer to our canvas but we can establish an analogous relation among our palette tints. This relation must possess the natural qualities of colour equilibrium ; just as a mountain, or other natural object, must possess in our drawing the natural qualities of mass equilibrium. Certain primitive work is undoubtedly beautiful in spite of the fact that the forms and tints of the objects represented do not fulfil our instinctive needs of equilibrium ; but these *naïvetés* are compensated by balance in the total composition. However, the equilibrium must not be of an ordinary, too evident, too simple a kind, or it will not fulfil the needs of our second hypothesis concerning parallelism with the Infinite in the case of works of art. In the case of natural beauty the equilibrium is always infinitely complex, though the complexities marshal themselves into simple groups, on which the artist seizes. Is not our feeling of content with a well-balanced picture composition based on the sense of stability, which, unconsciously from earliest childhood, we have built up from experience, visual and otherwise, of the material universe surrounding us ?

Our ideas of plastic possibility are, it seems, unquestionably derived from the sensuous impressions that we receive from the material universe ; and any innate idea would only be a tendency towards recognising the existence, or a capacity for using the fact, of such possibility, which, for lack of a better term, we will call stability. It will probably be objected here that the word " stability " seems to put movement out of the question ; this is done intentionally. Movement in plastic art should be suggested in a stable way and not imitated, as is done by inferior artists. Unbalanced movement is always unsatisfactory in painting simultan-

ously seen ; it is inadmissible in big sculpture. This point will be examined more in detail in the chapter devoted to sculptural means of expression.

In music and literature the question presents itself in a slightly different way. Dealing as they do with development in Time as one of their elements of expression, some imitative representation of movement is not in direct contradiction with the nature of the means employed.

Working on the foregoing assumptions, we see that the main difficulty of the artist is to satisfy this sense of stability in a series of relations that, at the same time, shall suggest other things. The mere arrangement in the form of a T, of a horizontal placed on a vertical, is an example of balance ; but it is of too simple and evident a nature to allow of the transmission of any kind of intention. A regular and limited sing-song rhythm in poetry is hostile to great suggestion ; the balance between the sounds should be less evident, though not less complete.

For was not Apollo with hair and harp string of gold
A bitter god to follow, a beautiful god to behold ?

SWINBURNE

may be taken as an example of a happy picture spoiled by a fatiguing inexpressive rhythm. Contrast with it the constantly changing rhythm and speed of the words in :

Where the bee sucks, there suck I ;
In a cowslip's bell I lie :
There I couch when owls do cry.
On the bat's back I do fly,
After summer, merrily :
Merrily, merrily, shall I live now,
Under the blossom that hangs on the bough.

Notice the surprise when one suddenly comes to " after summer, merrily : " following on the even accentuation of the first four lines. And then the two last—one can hardly say the words quickly enough—come in strange opposition

to the slow measured beat of the four first. The irregular music—the irregular equilibrium established—is more eloquent than the meanings of the words themselves. The comfortable, regularly repeated rhythm of the music of Beethoven is tiring, and void of significance, when compared with the ever novel invention of Rameau ; in whose compositions the changing rhythms play a suggestive part at least as great as the sequence and order of the notes themselves.

It seems probable that we might reduce all forms of beauty, both natural and artistic, to series of relations expressive of the Infinite. The more complete the analogy to high conceptions of that integral relation, the greater would be the beauty. Thus would be explained the admiration of superficial persons for forms of beauty considered to be inferior by those of higher perceptive powers. It may be objected that highly intelligent and perceptive persons are devoid of appreciation of certain manifestations of beauty. This in no way invalidates the proposed theory. It is not because one has an elevated conception of the universe, that one is necessarily capable of understanding a parallel to it, when presented in an unknown language. Indeed the difference between art manifestations would seem to be closely allied to differences between languages. We only arrive at understanding an exotic art after an examination of its special artistic "language," and continued study often reveals qualities to which we were at first blind. Many persons are incapable of understanding the language of form, others that of musical sound : while the exquisitely sensitive musician may be an execrable reader or critic of the visual arts of painting and sculpture. The personality may be receptive of one language, closed to another.

Another obstacle to universal appreciation of beauty lies in the habit one has of seeing its manifestations presented in

certain fixed ways. There is in the British Museum a wooden mask from the Queen Charlotte Islands, representing a Haïda woman wearing a lip-plug. The casual observer would doubtless proclaim it to be hideous ; yet the practised eye finds no difficulty in accepting its peculiar beauty, admiring not only the decorative tracings upon it, but also the sculptural qualities of the form itself.

From this and similar examples we are led to conclude that running through all schools of plastic beauty, however savage, through all forms of music, however uncouth, through all poetry are fundamental qualities which appeal to other races.

It was indeed largely owing to a perception of this fact that I was led to the seeking of some scheme of co-ordination, some theory of common origin : ultimately I was brought to the writing of this book.

Few words are used more confusedly than the word " beauty." Take as an instance the phrase " moral beauty." This seems to me to be a deliberate confusion of thought. It is true that we may admire a moral action ; it is true that a statue by its beauty evokes a like sentiment of admiration in us ; but it is in no way proved that the two causes have anything common to their natures. I submit that the word " beauty " is here used unconsciously, but none the less veritably, in a metaphorical way. Moral " beauty " depends on the moral scheme of the people ; and it would be very easy to find examples of two different peoples applauding absolutely opposed actions or judgments. Would a European ever accept some of the " moral " acts based on a savage system of blood-morality ? But throughout the entire history of the arts it is much easier to find points of contact between the various estimations of plastic or poetic beauty. We are evidently now dealing with another cause for our admiration. An examination of the nature and

causes of morality would be out of place here ; it will be quite sufficient to show that confusion with poetic and plastic beauty must not take place. It seems probable that such a confusion has arisen from the "moral" effects of certain works of art. Now if we take the idea "moral" in its widest possible sense, it may be partially defined as an artificial and variable position of human judgment with regard to certain components of the universe ; and by universe is not meant merely the material one. A great and successful work of art may be likened to a latent force capable of acting in a universal way on an attuned personality ; it will naturally influence the standpoint of that personality. But the morality is not in the work of art, it is in its "universality," which acts on the moral sense already in the spectator ; as indeed it acts on all other parts or manifestations of the personality sufficiently open to influence. The question of "works of art" executed with deliberate intent of preaching moralities does not interest us. They are sermons, explanations, campaigns, that announce their limited intentions immediately ; they are not universally applicable, "latent forces" that draw power from the analogy to the Infinite.

If we now pass momentarily to the domain of literature, it becomes evident from the foregoing considerations that a very careful separation must be made between the nature of the causes of our admiration in reading a literary work. Our admiration of the psychologic or moral character of an Antigone must not be confounded with that for the relations resulting from the elements combined by Sophocles. The opposition of the two characters of Antigone and Ismene is one of the relations that the author establishes, just as the word-relations are others, the rhythm and arrangement of the whole play others, and so on. Here the question of psychological representation by artistic means arises ; the first aim of the author being to generate, by arrangement of

his elements, the nature of the personality of his character ; this, when once generated, he uses, so to speak, again as a first element. It is in this way that the facial expression of a Rembrandt portrait is both produced and in turn produces.

I have dismissed in rather a summary way the phrase "moral beauty" as being only a metaphorical one. It is possible however that the expression may have come into popularity on account of an indistinct perception of a state of equilibrium, analogous to the more general ones of art, established among the various parts of an accepted morality.

In this chapter we are already brought into contact with the confusion that reigns, not only among aesthetic terms, but also in the overlapping of ideas. What do we really mean by art ? I have here supposed it to be such expression as, by means of relation, is capable, on account of parallelism of nature, of suggesting the universal relation which is the Infinite. Art is the expression of beauty in its different forms. So beauty becomes certain kinds of relation capable of suggesting the Infinite. By experimental examination both of natural objects and of works of art that are considered beautiful, we find that the relations produce in each case a resultant relation, which we are unable to distinguish from our idea of equilibrium. This result does not invalidate our hypotheses ; for, in so far as we can have any conception of the Infinite, we find that our ideas of perfect balance merge into it.

It little matters whether these hypotheses, these formulae, be true or not ; the essential is that they should work together, and should be applicable, without undue straining, to the examination of all forms of art.

Before closing this chapter, and as an example of the extreme subtlety of artistic equilibria, we might notice the curious relation, so often overlooked, between the nature of the subject of a painting or a statue, and the size of the

executed work. How often do we see, spread over an immense canvas, a subject really only adapted to minute dimensions. What might be interesting as a small *genre* picture is insupportably tedious on a large scale. How often a statuette would please, when the colossal rendering fails to convince.

VIII

PLASTIC IDEA

It is not by any means to every result of the action of the human brain that we can attach a word-name ; it is not every series of thought that can be explained in words.

For example, how am I to express in words the very clear idea that I receive from the form of a model's arm, which I subsequently reproduce, more or less modified, by my pencil on a sheet of paper ? Yet to minds attuned to plastic expression the " manipulation " of plastic form, the expression of universal ideas by suitable modifications of it, may be easy and natural. The relation between the notes or the total relation of a phrase of music is as much a created thought as is one expressible or explainable in words.

Yet it is quite impossible to put such a thought into words ; not only on account of the fact that the number of words at our disposal is limited, but also because the very nature of the thought is indissolubly confused with its natural means of expression. A similar, or we may even say the *same*, universal idea may be expressed by suggestive tangential means both by the musical phrase of a composer, and by the rhythmic line of a draughtsman ; yet the phrase and the line are distinct thought creations, though both may be illustrative or suggestive of the same universal idea. A person accustomed to think in " plastic thought " really

carries out mental operations in terms of form, just as a poet does in terms of words.

A mathematician would often be hard put to it to reply, if one stopped him in the middle of some abstruse calculation of modern analysis, and asked him to explain exactly what is the import of the expression just written by his pen ; but this is not quite a similar case to that of an artist developing a line or surface.

The mathematical symbols are after all convenient shortening of ideas which might be expressed as well, but more cumbrously in words. If I write $a^2 + b^2$ it is only a substitute for the phrase : an unknown, but constant, quantity added to itself, as many times as its own numerical value indicates, and then added to another unknown, but constant quantity, which has also been added to itself a number of times indicated by its numerical value. Instead of writing $\frac{dy}{dx}$ I should be obliged to explain the fundamental theory of the calculus every time ; yet it is conceivable that mathematics might still be carried out in this way without the intervention of symbols. It is however highly improbable in the case of modern mathematics, as I have already hinted ; because the symbols often execute the work themselves so to speak, and it would perhaps be impossible to keep their exact import, at any moment of the calculation, fixed clearly in the mind. Many of Newton's results have never been since attained by the direct geometrical methods he employed, though they have, of course, been controlled and surpassed by modern analysis.

Now the " plastic thought " and its manifestation, say a line or a surface, is not of quite the same kind as the mathematical ones just indicated ; unless, indeed, it be a mathematical line or surface, which are only the manifestations of numerical and not artistic ideas. For example, the circle is the manifestation of a certain continued quality, that is,

it is the locus of a point always equidistant from another point ; or, what is the same thing, the " manifestation " of a quantitative expression such as $x^2+y^2=r^2$. Such a line transmits no other thought, unless it be used as an integral part of artistic expression in combination with other parts. Even then the result is generally better attained by the use of a modified approximation to the circle—enabling it to have subtle analogies and harmonies with the other expressive parts of the whole—rather than the absolute product of a pair of compasses. Egyptian decorators always avoided the tasteless tidiness of the modern stencil-plate, which confounds those two very different qualities : tidiness and finish. Every Egyptian palmate figure is freely executed and differs from the preceding one, though the differences are slight, and in no way interfere with the unity of the whole frieze, and the necessary suggestion of repetition.

The accurate Greek key of to-day, carefully executed on a stencil with rule and compass, is almost empty of artistic quality. It may after all be exactly expressed in the words and numbers of a book of instructions in elementary geometrical drawing ; it is very different in intention from its freehand forerunner on an Attic vase.

Attempts are often being made to investigate aesthetic questions in experimental and statistic ways ; it would be as well to examine a few of the points in which such methods are doomed to failure. A laudably exact person once undertook to submit a series of six or eight differently proportioned rectangles to several hundreds of judges. He requested each to indicate the preferred shape. Although no rectangle was quite without its partizans, there was a marked preference for one or two of the forms. If I remember rightly, fifty or sixty per cent. voted for one form only, leaving the other figures to divide the remaining amateurs among them. On these and similar results the experimenter based a long

discussion. Now what I have just said concerning a circle obviously applies equally well to a rectangle ; that is, that a rectangle is not in any way a work of art, even of the simplest kind. Indeed I hardly hesitate to say that it is impossible to fill with artistic intention the simple relation between two quantities ; and such is the geometrical rectangle, for considered in this way it is merely a relation established between length and breadth. In fact, if such an expression be allowed, no "tangible" relation—by which I mean no relation which may be absolutely expressed in other terms, or which is completely comprehensible—can even begin to express transcendental things. Even an indeterminate relation of a single nature still remains mathematical and not artistic ; our example of the circle furnishes an instance. The ratio of the diameter to the circumference is an indeterminate quantity, whose expressing decimal extends to mathematical infinity, which *unlimited* sequence has, however, nothing to do with the Infinite. A rectangle then is simply and only a geometrical figure and can, at the best, only form a single element of artistic expression, such as, for example, the limiting frame of a picture.

However, there must be some explanation of the concurrence of opinion that the statistics in question showed. Unfortunately I am unable to refer anew to the book, and do not remember several details of the experiment. For instance, I forget whether the rectangles were presented as they were figured in the book, that is, all close together and in a certain fixed order.

This would introduce a serious source of error, because under such circumstances it would be impossible to obtain a single isolated impression of each rectangle ; the eye unconsciously institutes comparisons foreign to the point. Each rectangle would be judged by means of a composite impression in which figure at least three quantities, namely,

its own proportions, the shape of the space between it and the next rectangles, and lastly its adaptibility in form to fulfil the rôle required of it in the composition instituted by the arrangement of the rectangles.

To arrive at any just conclusion each rectangle would have to be presented separately, and in the middle of a very large sheet of paper, in order to put out of court inevitable unconscious co-ordinations between the form of the rectangle and that of the sheet of paper, with resulting appreciation, or the contrary, of the shape surrounding the rectangle.¹

It is possible that the appreciation may be due to ease in seeing the different shapes, and that the excess of opinion corresponds to excess of some form of astigmatism ; but such discussion would take us outside our province.

When asked to declare in favour of one or other of the rectangles, I, myself, found it to be impossible. My eye and brain being accustomed to constructive use of formal material at once saw the rectangles as so many framed spaces waiting to be decorated. As soon as I fixed on one, its neighbour presented other possibilities, different but not for that reason inferior—even the despised square, offers great decorative qualities ; an example is to be found in the well-known Parthenon metopes. I found it quite impossible to look on the rectangles as aesthetic entities, but only as aesthetic elements as yet uncombined, and therefore as yet possessing no aesthetic relations.

Another explanation of the general preference may be simply that one feels a comfortable sensation in seeing a

¹ It may be objected that a mathematical account may be given of the arrangement of an indefinite number of rectangles. This is another example of the impossibility of reducing such matters to absolute statements. At any rate an arrangement of mathematically exact rectangles will never be at its best other than a very poor work of art. The unexpected equilibria of the freehand Greek key are essential to any satisfactory result.

certain shape ; for the eye can certainly experience comfort or discomfort from the impressions it receives, just as well as any other portion of the nervous organism.

By eye of course I mean the joint action of the eye and brain, for questions of sensual comfort and discomfort are not limited only to the mere nervous reception. For example, the odour of roasting meat is considered agreeable by many hungry persons ; whereas the same people, unless they be cannibals, would cry out against the identical smell proceeding from a roasting human body. Our impressions are directly and intimately allied to our prejudices, which in turn are mainly the result of habit and environment. The rectangle experiment would have been much more interesting had the observer presented his figures to other nations, such as the Chinese, who have a distinctly different plastic ideal from ours ; we should thus have seen if that consensus of opinion was different from ours.

Though this question of ocular (or, in the case of music, aural) comfort is taken into consideration by artists, it should not, it seems to me, be confounded with the beginning of art. On the other hand one may perhaps with almost equal justice uphold the contrary thesis.

I myself am disposed to place precisely here the frontier between the artistically valid, and that which is not so ; whether it be a simple rectangle or the complex illustration of a monthly magazine. Both satisfy certain habits of tidiness, and give us a certain feeling of admiration for things that are workmanlike and well done. Now a statue by Pheidias gives us these satisfactions, but it also gives us much more ; being a great work, it has succeeded in containing artistically valid relations which, nevertheless, satisfy other sentiments of accuracy. In the case of a canvas by Cézanne or Van Gogh only part of the programme, that of the validity, and that only in a minor degree, is fulfilled. In the case of

many painters and illustrators the other part, that of tidy workmanship (in which I include wilful imitations of disorder, when such is the fashion, for they are generally disordered in a tidy way) is the only bid made for success.

Obviously here as elsewhere our frontier is shifting and imprecise, being as usual an artificiality. Such-and-such an illustrator may contrive to mingle in his meretricious technique certain artistic validities. Our frontier is not a line ; it is a neutral zone. In the appreciation as well as in the execution of art a sense of measure is needed ; it is so everywhere.

When does an abstemious man become a glutton ? At any rate we are safe in not calling the Trappists, with their single frugal meal, gluttons ; and we are equally justified in instituting a profound difference between a rectangle and the Theseus. Meals more or less comfortable are a necessity of existence ; proportions more or less comfortable are almost equally so ; gluttony is an exception ; the quality of artistically valid relations superimposed on the comfortable ones is an exception too, though in this case an admirable one. I am convinced that many people live with artistically valid and beautiful objects and only appreciate the comfortable and tidy elements of their composition. Such people naturally fail to distinguish between the tidy finish and pose of a meretricious statue, and the equally tidy execution of a great work, because they are incapable of appreciating the existence in the latter of the abstract intentions of relations, which seem to them only tidily and comfortably arranged. Such people will generally appreciate the work which represents in the nearest way agreeable reminiscences of their own ; they esteem facial expression as a high factor in plastic art.

Before leaving the subject of the most elementary form of artistic expression that is possible, we must, however, consider it in relation to such an art as architecture. It is evident

that here may be found the most serious argument in favour of the rectangles. I have said that no line or shape of which the nature may be transmitted by means of verbal instructions, can be artistically valid. The reader would be justified in replying that an architect's orders are (or might be in almost every case) so transmitted to his workmen. We are here in the presence of another example of the difficulty, if not the impossibility, of making absolute statements, mathematical in their rigidity, concerning a subject with which is intimately commingled the complex factor of the personality. It is not perhaps sufficiently recognised that theory *cannot* fail sooner or later to be at variance with fact ; theory is a reduction to a smaller scale of the truth too extended for our comprehension. Art might be called a branch of Theory. Art is metaphoric in nature. It would obviously be absurd to lay down *a priori* limits to the kind of hypothesis that shall be made concerning the nature of matter or of light. The court of appeal is the coincidence of observed facts with the logical deductions from the theory ; these two things are never wholly in unison ; first, on account of the nature of theory itself ; and, secondly, on account of the introduction of that artificiality : human logic. To every theory there will inevitably be an inadequate zone.

In the case of the measurably determinate proportions of artistically valid architecture I may call the reader's attention to the question of scale of magnitudes appreciable by the human eye and executable by means of instruments. By a micrometric system of squaring it would unquestionably be possible to reproduce a drawing so exactly as to surpass the limits of ocular criticism. Such a calculated drawing could not fail to have the same aesthetic effect as the original. Art, as most things are, is a series of approximations. The eye soon fails to distinguish between closely similar spectral tints. In music it is found unnecessary to take count of a

note interval of $\frac{81}{6}$. In a similar way microscopic correction would be wasted in the curve of a great arch.

Unquestionably scale is one of the elements of the establishing of valid relations ; what is artistically valid in small work is not so in big, and *vice versa*. The careful model of the Parthenon in the British Museum reminds us more of a doll's house than of a masterpiece ; the work of Ictinos and Pheidias was conceived by them in its veritable proportions, as well as in its veritable surroundings. A painter wishing to represent on a small canvas the dignity of the Parthenon would instinctively modify the facts of the original, would create a new series of relations adapted to his scale. The larger the work the more one would seem to be able to use, as elements, purely geometric forms.

I have called attention to the above-mentioned points for what they may be worth ; but probably the real explanation of the possibility of using simple geometrical forms with artistic success in architecture is the one brought forward in the chapter specially devoted to the subject, namely, that a building is one with its surroundings as a work of art. It is in a way the inversion of a picture whose varying and complex relations we enclose within a geometric frame ; in the case of architecture the geometric quantity is within the complex one.

Music is another example of an art presented to the audience according to instructions transmitted to the executants. It may be termed a doubly expressed art, for the instrumentalist plays a far more important rôle in the result than does the stone-mason in building. Evil execution can almost entirely destroy a masterpiece. On the other hand, I have recently heard Bach played by a French musician, who introduced a variety of rhythm and accent certainly foreign to Bach's original conception, which greatly enhanced its beauty.

Indeed one wonders whether the uninterpreted musical score can really be looked on as a definite series of relations, or only as a suggestion of possible ones to the artistic sensibility of the player. It is an indication rather than the exact communication of a complete work of art. All of this only amounts to saying that artistic thought is only completely transmissible in its own medium.

IX

PLASTIC LOGIC

THE form or colour used by a sculptor or a painter is not only a language fitted to express his thought. It is, or rather its conception is, the thought itself ; it is directly moulded, as is every thought, by subconscious intuition or cerebration.

Instruction will naturally modify and direct this moulding force ; for instruction and environment modify the personality, change our ways of thinking, to use the popular expression.

The personality—the equation—is not really modified, only its manifestation—the curve. The influences and environments were, so to speak, foreseen in the primitive “equation,” they are due to the position—to continue the geometric simile—or to the conditions of existence of the personality in the universe.

If this be so, we see why art should give us a farther view, and a less distorted one, than more complex forms of reasoning influenced by the intrusion of arbitrary logical laws.

Even in art we are not free. We are trammelled by inevitable restrictions inherent in the work. Such are the fundamental necessities ; as for example, the obligation to remain within the frame or limits. The literary artist is bound by dictionary meanings, and by grammatical forms. At the same time these very restrictions aid us—by limiting the matter to be manipulated—in constructing a simpler series

of relations, and thus bringing the resultant one more within our power.

Again, the logical laws which govern reasoning have their analogy in that more subtle and recondite region of plastic art; we might even speak of a "plastic logic." Such a phrase brings out closely the profound difference between the two modes of brain activity. While the term "plastic logic" seems quite, if not completely, acceptable, the term "plastic syllogism" at once declares its own unfitness. Why? Because the one mode of brain activity, the literary philosophical one, at least in its exposition, develops in sequence; the sculptor's, and to a very slightly less extent the painter's, is simultaneous. The one may be likened to a line, the other to the surface of a figure, such as a circle.

The syllogism exists only when we pursue its established order.

All men are mortal,
All kings are men;
 therefore
All kings are mortal—

is a syllogism. If we begin by *All kings are mortal*, and try to work backwards, we arrive at nothing at all. A syllogism is a mental production of which one essential element is a single defined direction; it develops in an oriented line. The syllogism is the soul of ratiocination. Nevertheless, Locke very justly remarks: "If we will observe the actings of our own minds, we shall find that we reason best and clearest, when we only *observe the connexion of the proof*, without reducing our thoughts to any rule of syllogism"; the italics are mine, for he only continues to propose the "ranging of ideas in a simple and plain order"; which is, of course, once more a retention of the linear element.

Again, John Stuart Mill says: "The reasoning lies in the art of generalisation, not in interpreting the record of that

art, but the syllogistic form is an indispensable collateral security for the correctness of the generalisation itself." The art of generalisation can hardly be looked on as a linear one,¹ it would be more an agglomerating concentric one, the extracting of a quintessence of wider applicability, and this is precisely the use to which a plastic artist puts the inexhaustible detail of his model.

It is obviously possible to make an unlimited number of artistic generalisations, whereas there is only one Boyle's law,² when we limit ourselves to first approximations. This is because the artistic generalisations are representative of a metaphysical basis, while the law in question is representative of a physical one. Now physical relations are directly observed through the senses, which are developed in man to a fairly equal degree; whereas metaphysical conceptions, even though we assume them to have a real objective existence, are only perceived through the nature itself of the personality, a quantity far more variable from individual to individual, than the senses are. Consequently a great variety will be noticed among the kinds of abstraction exercised by different artists, and destined to form the means of expression of their ideas. Probably, then, "plastic thought" does not differ so essentially in its methods from its usually recognised congener as would first appear, except, of course, in its use of a material form of expression. The difficulty arises in the non-existence of a formal "plastic logic" which shall act as a "collateral security for the correctness of the generalisation."

So far we are only able to use the almost unconsciously co-ordinated results of study on a naturally apt mind, obviously an uncertain base, when compared with the Aristotelian logical method improved by centuries of use. And it

¹ See note at end of chapter.

² Though the variation of this law really brings it in line with all other attempts at reduction.

seems likely that no efficient substitute of a crystallised nature will present itself, owing to the impossibility of presenting plastic thoughts in other than their natural form. I have long noticed that divergences of opinion on matters artistic spring much more from ignorance on the part of the critic, than from non-existence or indefinition of plastic laws ; and by ignorance I mean not only lack of acquaintance with works of art of all kinds, but also that comprehension of the order of importance, of the composing elements of form and colour in the natural universe, which only can be attained by long practical study. Most so called art critics have not even taken the preliminary step towards a justification of their self-assumed position.

It is difficult to state the plastic laws in the convenient phrase form generally used in the case of physical laws ; on account of the lack both of sufficient philosophical study of the phenomena, and of convenient ready-made terms. All the same, during the course of this examination I shall attempt to establish a few general conditions of plastic expression which are fulfilled by all art manifestations, which are recognised as excellent, from prehistoric times downwards.

Let us consider a little more attentively the kind of thought which finds its natural expression in plastic form.

Perhaps the easiest example to take will be a portion of the surface of a statue. It is undeniable that the arrangement in space of the different points that constitute it is a creation of the sculptor's mind. Also the work must be continued, if it be unfinished, on the already chosen lines without compromising the homogeneity of the work. No two sculptors working from the same model will produce the same arrangement of these points. Such an arrangement is indeed the artistic intention itself, and is strictly governed by the artist's self-imposed scheme.

The sculptor must "logically" continue the system of placing which he has undertaken, otherwise he will obtain a heterogeneous and incoherent result. Now his work is just as consequent, just as valid logically, if we consider it proceeding from the point A to the point B, as if, reversing the direction, we go from B to A. Even this is to be too arbitrary. The unity of a statue does not lie in its development, but in its simultaneousness. Again, as I have already pointed out, the passage from the "immaterial" thought of the sculptor, one might almost say "potential" thought, to its realisation, as a directing force of his hand, is imperceptible. One hesitates even to call it a passage. The "plastic thought" seems to come into existence, completed by, and inseparable from, its visible transcription in form. The intention of it, its quality, is a result of the governing and directing force of the personality. It is itself the manifestation "in time" of the personality. It is the momentary fact of the developing personality. The growth of thought, or the continuity of thought, brings one to a change of attitude towards oneself, that is one's personality, like the movement of a vortex atom or smoke ring turning in, so to say, on itself. The personality modifies itself, and necessarily the artistic effort changes in direction. It is not by means of a voluntary effort that an artist can satisfactorily change his technique,¹ which is to a great extent an immediate function of his personality. It is not because a line is

¹ A clever but superficial artist of my acquaintance—he was in reality a house decorator who, passing through the Beaux Arts, had extended his ambition—decided, on seeing some directly executed drawings in pure single expressive line, to change his sketchy method for the other. Thanks to his skilfulness, he quickly arrived at his end . . . as he thought. But his new line was every bit as empty of meaning as the more sketchy technique he had forsaken. He had nothing to say with his skill. A change must be more profound, be rooted in a modification of personality, in a change of outlook.

executed in a particular way, that it *must* express the form of thought that *may* be expressed by a line of similar appearance.

To return to our main argument, the consecutive nature of form or colour is thus not really analogous to logic. For it really brings nothing new to the mental position ; it only aids in carrying it out. Whereas a train of logical reasoning may bring us to results not before realised ; although, of course, their germs lay already in the premises.

I have tried by means of two opposite statements to bring out a little more clearly the difference that exists between the "plastic" brain and the "literary" one. The one both thinks and expresses itself simultaneously ; the other *in extenso*. We might compare the literary—or musical—mind to the development of a line in which the point *B* must necessarily follow the point *A*, and *C* follow *B* and so on : otherwise the sequence is destroyed, and with it everything disappears.

If we now think of the plastic mind in function as being analogous to the surface of, say, a circle ; and on the surface—not on the circumference—we consider a series of points *A*, *B*, *C*, *D*, etc., it is evident that in proceeding in any order from one point to another we shall be able to establish the surface, which, in the clumsy illustration, stands for the mental act. Here the logic binding the situation is not an order of thought as in the case of the line, it is a simultaneously applied force which simply keeps the points in the same plane. This may be what is generally called intuition, as distinct from categoric argument. In any case the mind capable of producing the greatest architecture and sculpture is the mind most purely constructed on these principles. In the case of painting there is already introduced the beginning of an element of development both over and into the surface of the canvas.

The garland-like arrangement of the *Embarquement pour Cythère* of Watteau is already literary in conception and inseparably allied to the dramatic development it aids in expressing ; which is indeed an effort to extend plastic art beyond its natural limits. A large part of the means of expression of Turner (in his later work) lies in the ingeniously combined conical masses of similar colour, which carry the eye irresistibly into the farthest distance. Turner at least uses a purely plastic means of expression ; but Watteau brings in the dramatic story-telling element. It is true that in the *Embarquement* it is so cleverly done, so intimately allied to a light lyric wreathing of the form, which recalls the delicate rhythm of a minuet, that one is inclined to regard with lenience this derogation from the plastic tongue. The dramatic motive of the picture develops from right to left. Each group is one step farther towards the acceptance that the little Cupid on the right importunes the last still reluctant beauty to accord. Scarce three groups farther on the feminine refusal is no more, and it is man's turn to take the almost passive part. Follows the boarding of the boat ; and thence a joyous line of winged Loves fades into light and air towards the promised isle.

But this is literature—ably translated, it is true, to visual art, and made acceptable by a masque of form, or rather of arrangement ; for Watteau is no master of form, and terms must be kept distinct. His drawing is sketchy ; light agreeable representations he gives us of the more fundamental rhythm and essence of form ; the lightness verges on the flimsy. Jean Goujon, all as French—or more so, for Watteau is too particularly of the eighteenth century—gives us light and graceful form, but full and completed in conception and execution. However, such detailed criticism will find a better place hereafter.

The Panathenaic procession follows two directed move-

ments, both starting from the south-west corner and encountering one another again in the principal event, the delivery of the peplos, in the middle of the eastern side. But we notice at once an essential difference between this directing and that of Watteau, or that of Turner. The first is dramatico-plastic ; the second, a most inseparable plastic constituent, the invention of whose nature is the most important effort of the artist. The frieze movement is a simple straight line already determined by the building and thus not due to the artist's invention, being a mere straight line it remains in itself inexpressive ; while the sinuous progression of lovers and of Loves is the very soul of Watteau's painting. The only place in which invention may be displayed or used in the frieze progression is in the spacing of the figures. But the very use of the word spacing implies to a certain degree the absence of the continuous linking that is possible in paintings in which background colours and forms fill up the intervening gaps. Rameau, in a remarkably beautiful fragment, has striven to reproduce the sentiment of this frieze in his own medium of music which really develops in time. It is indeed here that one may find a point of contact between music and sculpture. The sharp clearness of Rameau's composition, free from all softening transitions or see-saw regularities of rhythm, renders singularly well the precision of the sculptured forms, their individual, separate placing. In a sense the frieze also develops in time as does music, for it is impossible to take in more than a small portion of it at the same moment ; we are obliged to walk along it to realise its full development ; the translation into musical form is thus rendered easier. The figures are projected, so to say, vertically and in profile on the marble, and unity of the whole is assured by value of position, not by linking lines. The greater part of modern relief is partly based on composition principles only proper

to painting. In this respect the Florentines were the first to sin. The gates of the Battistero are an unsatisfactory compromise ; the panels are composed into the surface, which is destroyed by misplaced perspective, instead of being scrupulously preserved. The truly sculptural mind seeks its expression in concentration, it does not seek to expand and spread over the surface and into the depths of a canvas.

The purely sculptor's mind formation is undoubtedly the farthest removed from the literary one, if we except that of the architect. The distributed nature of both form and colour renders them more suitable to the use of a mind already containing some tendencies towards expression in development.¹ Nevertheless one form of colour is at least more in harmony with the nature of sculpture than are others. The clear deliberate juxtaposition of tints ungraded, or almost ungraded, and limited by definite contours, has some analogy with the arrangement of that side of sculpture which develops into bas-relief. But the very nature of colour is less abstract, less fundamental than that of form. Colour is a secondary thing : it needs the aid of lighting for its existence, whereas form exists even in the dark.

We all know the story, truth or fable, of Michael-Angelo in old age, blind or almost so, caressing with his hands the sculptured forms of the *Torso del Belvedere* he could no longer see.

Those who have modelled in clay will remember how much of the first *ébauche* may be done without looking at the work. The eye follows the forms on the living model, while both hands push and mould the statuette incessantly into shape.

Material is taken in by the eye, transformed both intentionally and subconsciously by the personality, and thrown out anew as individual, artistic, intentional form that the hands are commissioned to execute. Later the artist's eye

¹ See line 5, p. 237.

performs merely critical functions. It first compares the visible result with the particular intention of the figure, and secondly, the spirit of the work with the universal idea of the artist. This last is necessary because sometimes, influenced by extraneous circumstances, an artist is tempted to produce, either knowingly as an experiment in technique, or unknowingly, work not in complete accord with his personality.

Aesthetics are concerned with the study of the conception of certain ideas, and of the moulding of a given medium into such shape as shall evoke in a second personality similar, but not necessarily the same, ideas. The subject is further complicated by the fact that, in certain forms of art, one hesitates to call by the name idea the vague emotional state which figures respectively as cause or as result in the triple operation just mentioned.

To my knowledge very little attention has been paid to the study, not of the conception of ideas in general, but of the form or direction or kind of their conception. Now it is evident that in our present subject this study is of paramount importance ; for art is but the expression of ideas suited to expression in artistic media. The brain of a mathematician may be extremely fertile and yet never conceive an idea which may take on the form of artistic expression, though his ideas may belong to the same general class as those of a contemporary artist compatriot. We must then suppose a kind of moulding exit of thought, which directs that purely abstract potentiality to think, which is governed by the spiritual and temporal conditions of the personality, that is by the nationality and epoch.

Though intuition is of course the mainspring of most human action, and probably of animal too ; and though intuition would appear to be a simultaneous and immediate thing ; at the same time deliberate reflection, study, inten-

tional thought, would seem generally to take on an extended or linear sequence form, as we have already seen.

I have chosen to use the case of form in this examination of the nature of the thought of plastic arts, not only because of the more fundamental nature of form, but also on account of greater ease of demonstration owing to the greater simplicity of the material. However, all that has been written, with suitable modifications may be applied to the allied questions connected with colour and with chiaroscuro; though the less precise nature of these last two renders it increasingly difficult to trace the really arbitrary line between the subject matter of this chapter and that of the more special one dealing with the means of expression at the painter's disposal.

After all we only see form by means of colour and of chiaroscuro,¹ though both may be extremely delicate in their modulations. At the same time conceptions of the nature of form, or plastic formal thought, are free from these concomitant ideas.

Let me not be understood to mean the mental visualizing of say a statue, which of course presents itself to the mind's eye clothed in intention; which intention finds its material and visible expression in the statue's surfaces or the pencil's line.

To resume the more important points brought forward in this chapter, we may briefly say that certain kinds of mental action are adapted to transmission to other persons in certain media only, some in words, some in mathematical symbols,

¹ Though stereoscopic vision plays an appreciable part, and is doubtless responsible for much of the relief of good line drawings (and its absence for the flatness of some photographs); the pencil drawn profiles of the two sides of a figure are not those which would be seen by separate eyes. This may be one of the reasons for the impossibility or great difficulty of making a plastically valid drawing of a nude from a photograph.

some in colour, others again in sound, and so on. The intense difficulty that we experience in separating the mental act from its expression is an indication of the artificiality of all analysis, an indication of the necessity of more integral forms of philosophy. At the same time we are obliged to use analysis and classification as an aid to the inefficiency of human comprehension. Some of these kinds of mental act, those of the sculptor for example, are not governed by the recognised linear laws of ratiocination though they are homogeneous and consistent in their extent. Intuition in the occidental reasoner's mind at once clothes itself in a form of linear development : in the sculptor's it puts on a simultaneous " surface " nature, to use our figure ; indeed intuition itself would seem to spring from some allied act. Reasoning is an artificiality and sign of hyper-refinement ; the intuitive simultaneity of plastic art is an earlier and more powerful instrument. But excellent co-ordinated universal intuition is far more rare than good reasoning, itself not often met with. We have previously postulated correlation to a greater or less degree with the infinite as a necessity of artistic validity : thus not every mental act expressible in form constitutes an artistic idea. We notice that it is impossible definitely to indicate the simplest relations capable of fulfilling the artistic conditions. Our class, Art, is as usual bounded by a neutral zone. Its separation from other phenomena is as convenient, but as artificial, as that of the light from the heat spectrum. Nevertheless in practice we can establish a limit, and it would seem safe to exclude such simplified phenomena as a rectangle or two isolated notes of music.

NOTE.—The power of conceiving otherwise than in a linear way is very unusual. This is curiously exemplified in Spencer's " Psychology." He says (Part I. Chapter 3) : " Let anyone

attempt to form an idea of the whole surrounding sphere of space simultaneously, and he will find it impossible to do so. When standing upright he can very well conceive the hemisphere of space extending in front of him ; but he cannot in the same act of thought include the hemisphere of space that is behind. On watching his mind he will perceive that in thinking of the space that is behind he becomes momentarily unconscious of the space that is in front. If, to get rid of perturbing circumstances, he mentally abolishes the earth and all objects and supposes himself in an infinite void, he will still find that the infinity at any moment occupying his imagination is the infinity extending on one side of him, and never the infinity on both sides . . . ” Leaving out of our consideration all questions concerning the difference between the idea of space and its imaging, which the quoted lines seem to confuse, I may say that the statements are quite incorrect ; that I can by three separate mental acts, first : conjure up the “ hemisphere of space ” (to use the Spencerian phrase) before me ; or more strictly, concentrate my attention on it ; for, contrary to Spencer’s statement, I find it impossible completely to detach and isolate my conception from that part which is behind me ; secondly : conceive, or rather think of simultaneously, an “ infinity ” (a mathematic infinity or an *indefinity* philosophically speaking) on each side of me, and, as the phrase implies, of a linear nature ; and lastly a three dimension indefinity. Spencer would have made a poor sculptor. His mind seems to have worked on purely linear principles, and to have lacked not only transcendent qualities, but also those of enveloping simultaneous conception of back and forth and lateral relationship.

While speaking of the *lacunae* of his system I will call attention to certain lines on the last page but two of the same work which if they were true would compromise the validity of all the theoretical part of the present book. “ Either the

ego which is supposed to determine or will the action, is some state of consciousness, simple or composite, or it is not. If it is not some state of consciousness, it is something of which we are unconscious, something that is unknown to us, something, therefore, of whose existence we neither have nor can have any evidence . . ." then comes the amazing conclusion "something, therefore, which it is absurd to suppose existing." A Frenchman to whom I translated the passage assumed at once that he had not understood my translation and asked for a repetition, so outrageous and illogical did the last step appear to him. The previous reasoning is also incorrect.

If it is not some state of consciousness, it is something of which we are unconscious, he says. The phrase is of an elusive nature and contains an implicit confusion. Would Spencer have said we are conscious of life itself? Would he have said we are conscious of the ultimate direction and planning of our individual acts in the making of the world's history? Would he, an evolutionist, attribute to each evolving individual a sense of its rôle and position in the evolving scale? Or does he mean by consciousness conceivability? One would then be "conscious" of evolution because one conceives it as possible, conscious of it for fifty or sixty years? Have we no evidence of its existence? What is meant by evidence? Is it visibility or tangibility? What proof have we of the existence of mathematical abstractions? The whole piece of reasoning is defective. The nature of Spencer's *ego* is established by the form that his reasonings (among other things) take. It is the formative abstraction that produces the form of the thoughts of Spencer. The existence of the thoughts and a certain cohesion among them are the evidences we have of the existence of the *ego*.

X

THE APPRECIATIVE PERSONALITY

IT has already been remarked that the only means of appreciating, estimating, or classifying works of art is by means of the sensitive personality. In this art differs from science. We have no constant galvanometer or thermo-electric pile which may be applied to the measure of art ; our only measuring instrument is our own sensitiveness to the subject. Unfortunately this is an instrument of which the constants are in continual change. Not only do our artistic judgments differ from those of our neighbours, but they differ from our own of a few years ago, when our information was less, when we lived in a different environment ; and so on. I myself began by being a Turner enthusiast. At the same time, however, I passed the greater part of my time in drawing from the antique and from the nude : though the antique, at any rate, interested me but little at that time. I drew it more from a feeling of duty than from a genuine love of the subject. My nude drawings, too, at that epoch were of the emotional type. I studied Michael-Angelo with strictest attention, and was hardly aware of the existence of Greek vase drawings. I drew as a painter draws, in a sketchy way, using the light and shade effect and continually comparing the impression, received in a glance at the model, with that given by my nascent drawing. Nevertheless from the first I felt myself instinctively using line profile, though of course in a clumsy and uncomprehending way. My *début* in

modelling was due to the idea (and a perfectly correct one it is) that the best way to learn artistic anatomy is to model anatomised figures in clay. Thence it was but a step to realise that drawing (I mean here the technical capacity to execute) is nothing more than understanding the construction of objects, and that the best way to understand their form is to reproduce it, not in an illusory way on flat paper, but as it really is, in three dimensions in space. Thenceforward I was to be found daily before the nude model in the sculptor's studio, industriously forming clay into a human simulacrum.

But this was happening in Paris ; and though as yet my studies were only consciously directed towards a perfecting of my painting power, I was gradually but surely succumbing to the charm of that purely formal expression, whose tradition still lives in France. Why should austerity, parsimony of means increase the range of expressive power ? The question appears to me to be insoluble—unless the answer lie in the analogies between concentration and abstraction ; unless the spectator, in the presence of simple spatial expression, find himself more easily convinced of universal unity than when his attention is distracted by form, by colour, by light and shade, by more or less complex distribution of shapes over the canvas surface. The fact remains that those whose senses are attuned to the music of form, however receptive they may be to the eloquence of colour, will find themselves carried farther towards the last bournes of thought, higher towards the tenuous atmosphere of the abstract by rhythm of line and mass, than by shock or by harmony of tint.

I travelled in Italy, in Egypt, in India, in the farther East ; the immensity of the Soudanese desert, the nude or draped beauty of its living figures of bronze became known to me ; the flexible character of Chinese architecture impressed itself

on me, that power it has, so extraordinarily developed, of allying itself to, of harmonising with landscapes so signally different in type. And from all the memories of colour, rich or sober, turbulent or delicate, from the faint fair tones of desert rose, from the somnolent tropic heaviness of tint, from the light silvering of France, rises ever before me that strange prepotency of form. Changeful from land to land, as is the colour itself, provocative of thought, it is there in natural shapes; even yet more provocative is it in shapes moulded by the plastic artist's will. Slowly but surely I learnt the grammar of the formal tongue, and yielded to its high seduction. Emotionally I had begun; but, specially, "the glory that was Greece" had brought me to a delight in that sense of measure and its administration, in that voluntary casting away of the undoubtedly beautiful lest it should enlarge too much the circle of our choice, lest it should open the door to imprecision and to vagueness, to hazard and consequently carelessness of thought, thereby to decadence. I began to draw in pure, sharp profile; my line became the result of a decided unhesitating intention, completed before the pencil traced its visible manifestation, put down once and for all. Vague emotion lost its charm for me, became even irritating; while progressively the restrained and consciously limited ideals of Greece, the abstract, immutable ones of the East, gained an empire over me. I felt the value of the reticence of France; I began to realize the difference between the type of mind that categorically examines and explains even highly complex phenomena, and the type that attaches more importance to the suggestiveness of form, a thing so different from shape, for "form" is a term which may also be applied to categoric reasonings and groupings. And these two mind-types seem eternally to misunderstand each other. The first, of which we may take the English as an example, finds attention to a mere surface or shell of thought unneces-

sary, artificial and empty. The second, whose modern representative is, amongst others, France, considers the complete explanation as almost superfluous, and rejoices, above all, in the excellent presentation of the matter. This type is even ready to sacrifice the nature of the matter itself in the interest of expressive form. For form is to it more eloquent, more precise, more fraught with abstract beauty.

Every faculty is improved by use. Unquestionably one is born with certain more or less fully developed potentialities of thought construction or appreciation. However, though these potentialities may be fixed once and for all time at birth, their kinetic manifestations may be increased in intensity by habitual call on them; they may be modified by environment, and may thus even be enabled to cause outbreaks in unexpected directions. It is precisely this difference of potentiality which was superficially summed up by the indolent and practical "*de gustibus non est disputandum.*"¹ But the position is quite different when one looks on the work of art as a certain fixed quantity, on the spectator's personality as another, and on the appreciation as an intermediate reaction, of which the magnitude is determined by the degree of co-ordination between the two phenomena thus brought into contact: now the matter may just as well be discussed as any other phenomenon which is purely relative, that is to say: just as well as anything else, and just as usefully. An excellent work of art of the formally suggestive type will move but to a slight degree an exceedingly impressionable observer who is of the subjective, freely emotional, romantic class; because the degree of co-ordination between the two is slight. *As every complete work contains some of all ingredients, and takes class only by the excess of some over the*

¹ Perhaps we should not read the Latin in the light of modern aesthetic polemics, for by so doing we may attribute a wider, more abstract intention to the phrase than was intended.

others, our observer will always find some portions of the work capable of producing the required reaction on his personality. He will admire, for example, the light and shade of the Elgin Marbles ; though their qualities of expressive form, of conception may escape him and leave him unmoved. Naturally, if quite sincere, by which I mean not prepared to accept ready-made beliefs (such as the admitted supremacy of certain great names, without being really convinced of their right to that position), if quite sincere he will fail to understand why Pheidias should be more appreciated than Rembrandt, whom he finds, and rightly, more full of soul possibilities, of interest, of life, of poignant emotion ; he will dispute the precedence of Pheidias with an advocate of Rembrandt ; and finally will fall back on the conclusion that his opponent fails to see in the Rembrandt that which seems to him so marvellous, so expressive and limitless in psychologic extent : the definite periods of Rameau will seem empty to him when compared with the golden glow of Wagner. It is probable that orientation in one of these two directions necessitates not only distaste for, but, to a certain degree, blindness to the existence of the other. It is also improbable that complete receptivity, complete sensitiveness, to both ideals is possible ; nevertheless a certain equity of judgment may be achieved by carefully distinguishing between personal likes and dislikes, and the general aesthetic potentiality of the work.

Were the human personality an absolute scientific instrument such a position would be impossible : for the personality receptively attuned to one form of aesthetic activity would be completely irreceptive of another. However, we have to deal with a more flexible and more complex thing than a Hertzian receiver, and sympathetic vibration in the presence of a Greek vase does not necessarily render us quite impervious to the influence of Rembrandt. The human

personality is a curious compound of different forms of emotionalism and different kinds of intellectuality ; an appeal may be made to any part of the whole. At any rate with the romantic nineteenth century behind us, we all find the emotional easier of appreciation than the more abstract ; and even the prophets of the abstract are, I believe, generally quite as open to emotion as anyone. It is by a secondary exercise of what is almost judgment that the abstraction is preferred. I do not mean to say that this preference is not genuine. It is just as genuine as the unmixed love of the emotional ; it is in some sort the product of fervent appreciation, bridled by an equally genuine sense of restraint, of measure, of choice. One may feel intensely the magnetism of a Rembrandt's expression, and yet deliberately turn from it, governed by one's craving for more universal things, to some passive, timeless concept of Greece. One may follow with the trained and eager eye of the artist the exquisite modulations of form and colour on the nude ; and then, deliberately renouncing their use, transcribe the model into a studied simplicity of drawing and of tint. Indeed, of this I am almost certain, any simplification, any co-ordinated abstraction, any concentration to be a valid success, must be the product of a mind capable of appreciating the complex beauty of the original ; otherwise the simplification is an empty and meaningless skeleton, a product of academic rules. A delicate balance between freedom of emotion and controlling judgment is a quality of all great art. Judgment alone devoid of emotion cannot be productive of art at all. On the other hand, in the more highly emotional artistic manifestations, the use of judgment is practically restricted to controlling the order of choice among expressive elements. Here no controlling judgment is exercised over the nature of the inspiring thought, nor over the nature of the elements chosen.



A LATE 'TURNER' WATER-COLOUR. Shows the curving and conical arrangements of colour, their apices directed towards the compositional centre. This aids much in creating the illusion of vast distance. The care with which, for the same reason, he indicated detail behind detail in the foreground is also seen. Notice the extreme attention paid to all modelling

In considering the appreciative personality we again encounter the ever-recurring difficulty of distinct separation of classes really artificial in their nature. There is an undoubted difference between the productive artistic personality and the merely passive appreciative one. Yet we often meet with a highly receptive person incapable of the least constructive production ; and we meet a productive artist curiously limited in views, in knowledge, and, worst of all, in receptivity, not only to forms of beauty other than those he has chosen as his particular subject, but also to the greater refinements of his own division or class of work. It would seem that we must see in this confusion two main scales of excellence : the productive and the appreciative one, each being so to speak, a separate part of the personality—excellence in either does not necessarily imply an equally high grade in the other. To a limited extent it may be almost an advantage to an artist not to have an appreciation too catholic of artistic manifestations widely differing from his own ; too scattered an appreciation may perhaps vitiate the undoubting unity of his aim and intention. However, I believe this would only apply to moderately great men, and not to the more splendid personality of high genius. After all there is no real need to attempt any division between appreciation and production, when we remember that the knowledge of how to paint a picture in no way constitutes an artist. I have personally known many painters of quite respectable pictures to whom I cannot accord the name of artist ; they are merely clever workmen who have learnt a trade for which they have more or less technical aptitude ; just as one man is naturally a better carpenter and another a better mason. I have carefully studied the verbal appreciations that such painters have uttered before masterpieces ; invariably their appreciations are limited to the province of brush work, or some success of technical arrange-

ment. However, as great artists are generally, if not always, masters of their medium, our painter will seem to the casual listener to be of the same opinion as the more receptive person open to delight in the abstract intentions of the master. It is so easy to admire a perfect thing for different elements of its perfection.

Before we can have an universal appreciation of artistic excellence it would seem necessary to realise some such position as the following : Truth, conception of the Infinite, conception of the indefinite extent of the universe, all such aims are unattainable by their very essence, and art can but offer so many roads that may be followed for a little while towards the end impossibly remote. If, for the figure's sake, we place our ignorance, our inaptitude planet-wise, circling in remote orbits far from the heliocentric goal, we shall at once see that two roads, two incomplete, truncated radii, which might both, were they longer, have led us to the sun, may yet be diametrically opposed in direction. Hence the disputes and warring human camps.

Neither in art nor by plain inartistic use of words is it possible to communicate thought with accuracy. No one thought is separable from the other relations that are at once the personality and a product of it. A thought is a coherent or rather inherent part of the personality. Two persons meeting for the first time cannot hope to exchange ideas with success. The inefficiency of words must be helped out by some continually radial centripetal indication of an uncommunicable centre—in this case the personal point of view—and only after the co-ordination of countless imperfect indications can the listener hope to perceive, and then dimly, the real point of view of his interlocutor. I have often been accused of contradicting myself, when my only crime was that of approaching the same point from two opposed sides. Naturally the directions I chose were also

contrary one to the other. So it is in art ; the unchanging goal may be approached from many sides, though, from all, attainment is alike impossible. It may be attained more or less nearly, and by a road more or less direct. But why should the votaries of an approach from one side condemn those who strive towards the same end, though from another starting place ?

At the same time we must not confuse a real breadth of outlook with that generally intellectually idle state vulgarly known as a " philosophical " one, whose tenets may be resumed in the ready-made phrase of " live and let live." There is a wide difference between " letting live " and a full appreciation of the need and *raison d'être* of such a " life," and a comprehension of the place it takes in the scheme of universal equilibrium. The so-called " philosophical " position is usually taken up either by the idle or by the practical people of this world to whom abstract general thought, dealing with the essentials of things detached from their variable environment in time and space, is a closed thing—nay rather, it is to them non-existent. Indeed really abstract thinkers are as rare to-day as when Descartes wrote of philosophic reasonings : " elles demandent un esprit entièrement libre de tous préjugés, et qui se puisse aisément détacher du commerce des sens. Et, à dire le vrai, il ne s'en trouve pas tant dans le monde qui soient propres pour les spéculations de la métaphysique que pour celles de la géométrie. Et de plus, il y a encore cette différence que, dans la géométrie, chacun étant prévenu de cette opinion qu'il ne s'y avance rien dont on n'ait une démonstration certaine, ceux qui n'y sont pas entièrement versés pèchent bien plus souvent en approuvant de fausses qu'en refutant les véritables. Il n'en est pas de même dans le peu de personnes s'adonnant à la recherche de la vérité ; et même beaucoup, se voulant acquérir la réputation d'esprits forts, ne s'étudient à autre chose qu'à combattre avec arrogance les vérités les plus apparentes."

XI

PHILOSOPHICAL RECAPITULATION

IN the interest of clearness of exposition it will be as well to gather together in one chapter the more important assumptions that have already been put forward in the preceding pages, intermingled with statements of the reasons that led me to adopt them.

The mass of the book was written more than ten years ago, in complete ignorance of the then only partially existent Principle of Relativity. In re-reading it to-day I feel no desire to make any alterations, save one. Everywhere in the place of the word "relation" I had written "relativity"; but since then this word has received a somewhat special significance. I have therefore substituted for it the word "relation," which, after all, expresses my meaning quite as well. I wish to draw attention to the fact that this substitution corresponds to no change of idea on my part. I had adopted the then unusual word "relativity" to symbolise my unusual idea of placing the essential in an intermediate position rather than in isolatable absolute unity. To-day "relativity" has another meaning. That this meaning is by no means clear does not render the word less unfit for my use; for whatever may not be clear concerning its real and definable meaning, it cannot be gainsaid that its use immediately evokes the now well-known work of the mathematicians. Do I wish my conclusions to be associated

with theirs? At this moment of writing, despite my best endeavours, it is impossible to reply. Are my ideas completely compatible with their equational results? To reply to this question it would be necessary to be able to translate completely their equational thought into terms of ordinary or philosophical thought. This would seem to be for the time being impossible. Such problems as whether, when one calculates in terms of Gaussian co-ordinates, one is tacitly referring to an absolute frame of reference; or whether one is really calculating a variable in terms of itself would seem to be, in the present state of our powers of "relative thinking," insoluble. On this point I have consulted several mathematicians and have been able to get no reply. Yet this would seem to be a fundamental point in the determination of the valid welding of a purely relative philosophy to Einstein's calculations.

But even if there be discrepancies, even if there be grave discrepancies between whatever I may tentatively advance and what has been advanced by the mathematical relativists, the fact that I have been led to conclusions not wholly incompatible with theirs, although I worked from such a remarkably different standpoint as the aesthetic one, cannot be without interest. It almost amounts to a demonstration of the nature of future thought tendency. I myself feel convinced that we are at the dawn of a new epoch of thought; but that it is as yet too early to handle its unaccustomed forms successfully. For this reason I feel more than anyone the incomplete nature of the notions I am putting forward. Why then do I publish them? In the hope that they may aid in some small degree towards the consolidating of the new position. Even wrong ideas, if they excite controversy, aid in the extension of knowledge.

"What I have written I have written," quoted Professor A. N. Whitehead, when I consulted him concerning the

advisability of re-writing the philosophical chapters of this book, now ten years after its first inscription. Let my original pages then remain, with the few added notes put in on my first learning of the existence of the new Principle of Relativity. These old additions are indicated in the text. To the original manuscript I am adding the chapter on Recent Art, which I always had the intention of writing at the last moment before going to press. I am also adding the present synopsis of my actual philosophical outlook. To present anew the same ideas, in slightly different phraseology, is always helpful towards the clear communicating of them. Hence I ask my reader to bear with this second reading in a more compressed and collected form, deprived of subsidiary discussions.

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(1) An examination of aesthetic thought methods led me to the conclusion that the ordinary ARISTOTELIAN LOGICAL forms do not cover, by any means, the processes of aesthetic thought, *e.g.* : A plane on a statue is conceived in a certain position. As a result of it, and of the general convention of the figure, a second plane is determined "logically." But such "logic" is reversible ; or is indeed quite "unpolarised." A syllogism reversed is nonsense. In using it we are imposing a linear and oriented direction on our perceptions of the universe. Hence categoric and sequent reasoning constitutes a hypothetic and partial method of treating the real. It does not even cover all thought methods. A logician rightly accuses me of being here unjustly hard on accepted logic. He points out that such forms as the syllogism do not by any means complete the logician's list of methods of thought manipulation and inception. This is true. My idea was not to attack, in a hostile way, the extent of the logician's territory. It was only to make my own position clear.

(2) An examination of works of art led to the conclusion that the inter-relation of their composing elements was the important thing. This suggested that RELATEDNESS may be *always* the important thing. Why should it not constitute REALITY itself? *A* is not real, nor is *B* real. The reality is the relatedness between *A . . . and . . . B*. Each *A* and each *B* being in turn nothing but equally un-absolute *C . . . and . . . D*. And so on. It has been objected to this view that it only leads to some indefinitely distant, but still existing, ultimate pair, by renewed reduction. An apparently similar view to the one advanced here belongs, it is true, to the past. To that view the above objection is applicable; but it is, I think, inapplicable to the hypotheses I now put forward. It is most important to distinguish clearly between the two views.

(3) The older of the two views may be described as a semi-relative view of the universe. An attempt was made to attach fundamental importance to the relation between *A* and *B* and to deny absolute existence both to *A* and to *B*. But the full import of such a step was not realized. It was not realized that such a change of view point automatically carried with it a change in the whole thought system. The error was committed of reasoning about the new proposition in thought methods which tacitly suppose an absolute view of the universe. The newly introduced "relative patch" seemed incongruous, seemed to contain an implicit contradiction, when stitched into the existing "absolute garment." It was not realized that such ideas as "sequence" and "totality" take on a new aspect in a purely relative philosophy.

(4) The possibility of reduction of relations to a distant but existing pair disappears, if we consider Reality as different in nature from "linear" "cause and effect," chronological spatial sequence that we ordinarily suppose it to be. Let us make a new metaphysical hypothesis.

(5) Let us suppose the INFINITE to be something of the nature of a time and space equation ; something which is, in other words, the potentiality of a manifestation of time and space ; or, if it be preferred, a statement of the nature of time, space, and all the rest of the phenomenal universe, including thought. What is the equation of a parabola ? It is the potential statement of relations, which, if made manifest, become the visible sequence of points that constitutes a parabolic curve. The Infinite can be the abstract, determining, universal statement of relatedness, it can be a thing which bears the same kind of relation to the sensible universe as the equation bears to the traced and existing parabola.

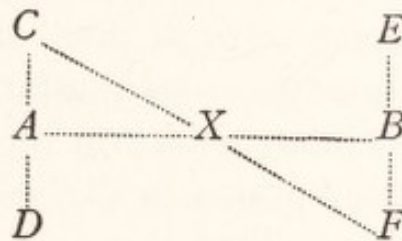
(6) I have used the words " real " and " reality." I am using them on a " transcendental plane," on the plane on which only pure relations exist. When the parabola is traced, when the pure relations crystallise to time, space, thought, and other phenomena, *A* and *B* have each a sensible and separate existence, *and so have we who observe them.* Relatively to us they *appear* to have a real and separate existence. But the reality of their existence is inevitably bound up with the reality of our existence, and with the reality of the moment of time in question. All parts of the proposition are reciprocal functions of all other parts, the entities are, so to say, inseparably interwoven. Any one only *is* by virtue of the existence of all the others, *and by the existence of itself*, without which the other factors could not themselves exist. The italicised words call attention to the continually involving system of conception advocated ; which, on the metaphysical plane, banishes all possibility of sequent conception. Such a way of conceiving " reality " must necessarily bring with it new thought forms. It must not be judged by means of thought methods which are based, however tacitly, on absolute principles.

(7) Let me develop more fully the notion already expressed in (2).

Let X be the relatedness of A to B .

Let A itself be the relatedness of C to D .

Let B itself be the relatedness of E to F .



We must quite give up the idea of "chain relatedness"; for : C and F not only do not exist except as relations, but when they do exist in this way, we must not forget that the relation C to F is established, as well as all other possible relations, by virtue of which the relations from which we started exist reciprocally themselves. Hence any idea of summing or series must be banished from the concept of the Infinite, which is indeed incompatible in essence with any spatial figuration. Its manifestation would continually involve on itself, and would thus be destructive of any system of co-ordinates. That is why I use the figure of an equation to represent the idea of the Infinite; an equation being the statement of the nature of the relations which continually govern a *possible* manifestation. (It should be remarked that A and B are taken in the most universal sense; *i.e.* as being manifested elements—of any kind—of the perceptible universe.)

(8) Hence PERCEPTION may be taken to be the manifestation of the relatedness of the personality of the observer to the perceived object. *Both* of which owe their very existence to the—and other—relatedness in question. This being, of course, considered on the "transcendental plane."

(9) I have advanced that an unlimited NUMBER OF UNI-

VERSES may be "manifested" from Infinity in its "equational" or potential state. To each of these manifest universes will belong, of course, a time-space-thought, etc., system. The observer will himself be manifest in this system, which will constitute apparent reality for him. Conceptions such as SIMULTANEOUSNESS and PERMANENCE will arise from the congruence of the "observer manifestation" and the "time-space manifestation," which are, indeed, inseparably "interwoven" in this conception.

(10) In all these assumptions, in all these hypotheses there is this underlying one: That there be an essential universal "SAMENESS," with which it may be useful to coordinate a sameness of our own invention. See (11).

(11) Events and objects may be said to have an individual CHARACTER. I prefer to deny this; and look upon such character as a necessary illusion due to relatedness between the observer and the event. That such character seems to be approximately constant to two observers may be put down to the necessary rough similarity between the two observers; the relation between one observer and the object will thus be fairly equivalent to the relation between the other observer and the object. Any other opinion seems to me to be anti-relative in nature. It tacitly supposes the free absolute existence of the personality which attributes a character to the absolute event or object.

(12) When we wish to solve a problem, it is advisable to reduce, if possible, everything to a function of a common factor. Can we not look on PERSONALITY as something in the nature of an equation also? As a statement of a nature of relatedness? This view condemns the problem of FREE WILL to the position of a badly stated one, in which there is an inherent confusion. On the metaphysical plane there is naught but determinism, all relatedness being pre-determined (note that the phrase has no real sense, Past and

Present having no existence in the absence of Time). On the "manifest plane" the manifestation *is* the act (now in Time and Space which owe their existence in part to it), *is* the "wave front" of the developing personality. Freedom of judgment and act is a necessary illusion. The choice itself is one of the manifestations of the personality; the choice cannot be other, or the personality would be other; the Act is another and subsequent one *in the now existing Time*, which co-exists with, and is part of, the personality (on the "manifest thought and physical plane"). On the metaphysical plane, I repeat, "subsequent" has no meaning.

(13) Nor have the terms "CAUSE" and "EFFECT." Which ideas are inherent in the greater part of our "linear logic."

(14) Even on the "manifest plane" our imposition of a "linear logic" on natural phenomena is but a rough approximation to a complete understanding of their nature. All LOGICAL REASONING (whether "linear" or other) begins by an artificial isolation of quite a few phenomena, not too many for our inadequate minds to grasp. The error is thus made in the first step. There must always be an unaccountable "residuum" beyond the mind figure; which residuum corresponds to the artificial "sections" that we have made through nature in order to create our isolation.

(15) But we have already seen that there are other forms of mental activity, *e.g.* the "PLASTIC THOUGHT" of the sculptor, which is, if I may be permitted the figure, not linear but multidimensioned, and not developed in Time (as a syllogistic form of reasoning is). In such a form of thought there is no orientation. It may be looked on as a constant involution of elements upon themselves. (Would it help the figuring of the idea to liken it to a vortex ring rather than to the linear path of a point?) But from such an idea one must abstract in the first case both spatial and temporal determinants. Only the idea of co-existence is to be

retained. (The question may here be asked: Does the idea of co-existence inevitably include the Time idea? In the present state of thought either a positive or negative reply to this question seems to me to be of the nature of a personal opinion.)

(16) But after all is not logically concatenated thought (at least as a productive instrument) very rare? Is it not in practice confined to mathematical reasoning? May we not term REASONING co-ordinated emotion? Is our sense of shock on hearing a false conclusion to a syllogism other than an emotion? What other term can we apply to the feeling of inability that we experience when we are asked to accept as true the converse of some fundamental postulate? Such emotions would seem to be inherent manifestations of the personality; would seem to be necessary relations between the personality and other relations which constitute the manifested universe; would seem to be necessary concomitants (see (5)) on which their own manifestations reciprocally depend.

(17) I will here note a point in passing. It may or may not be of importance. Does not, in one of its results, the Principle of Relativity support my view concerning the artificiality of "linear logic"? We begin by supposing the velocity of light to be constant relatively to any given frame of reference.¹ We reason mathematically (*i.e.* logically). We find that the velocity of light is necessarily variable (curved propagation in a gravitational field, hence an accelerated normal component). But unless it had been supposed, unless it *was* constant, it could not have been found variable.

¹ This idea would seem to be impossible of conception in ordinary and non-relative methods of thought. How can a velocity be constant in relation to two or more frames of reference which are in movement relatively to one another. In "relative thought" the difficulty disappears.

Is it not possible that the logical reasoning (absolute) in this case shows itself to be but a "first approximation"? On the other hand Professor Whitehead has re-calculated the essential part of the principle without assuming the constant velocity of light. This being so the above suggestion would be invalidated. Again Monsieur Guillaume attacks the fundamental transformation formula of Lorentz.¹ It is evident that in the present state of knowledge we can scarcely hope to decide on such points.

(18) It should be remembered that logical reasoning is an European invention *only*. It is not an inevitable quality of

¹ Notons seulement le point de départ : C'est la remarque que, dans les équations de Lorentz, ne figurent pas en réalité deux durées τ et τ' mais *deux chemins parcourus par la lumière* et que, *a priori*, c'est une décision absolument arbitraire de les écrire comme le fait Einstein : $c\tau$ et $c\tau'$, c'est-à-dire comme parcourus à la même vitesse en des temps inégaux. M. Guillaume pense qu'il convient de leur supposer la forme générale des abscisses des points d'arrivée au bout d'un même temps t , de radiations se propageant à des vitesses différentes, et il essaye deux expressions : $a+bt$, $a'+b't$. En leur imposant les mêmes conditions qui caractérisent le problème, et notamment celles de satisfaire aux équations de Lorentz, il parvient aux expressions suivantes de τ et τ' en fonction de la seule variable t ,

$$c\tau = \frac{c}{\beta}t + \frac{\beta - 1}{a\beta}x,$$

$$c\tau' = \frac{c}{\beta}t - \frac{\beta - 1}{a\beta}x',$$

les équations de Lorentz étant prises sous la forme :

$$x = \beta(x' + ac\tau')$$

$$c\tau = \beta(c\tau' + ax')$$

avec

$$a = \frac{v}{c}, \quad \beta = \frac{1}{\sqrt{1 - a^2}}$$

c = vitesse de la lumière.

v = vitesse relative des deux systèmes.

Ainsi au point de vue mathématique, il est absolument indifférent d'employer les deux variables τ et τ' ou une variable t qui leur est liée par les équations de M. Guillaume. C'est une simple question de forme mathématique.—*La Notion du Temps, d'après Einstein*; par Paul Dupont. Librairie Felix Alcan, 1921.

the human mind. To this it has been objected that Asiatic students learn to use European logic. It should be remarked that this is in no way a contradiction of my statement that it is an European invention ; though the objection was made to me with that intention.

(19) Pursuing our reduction to a common factor (see (12)) as means of adequate comparison : May not a WORK OF ART be considered as a total relatedness ? (All idea of addition as an expression of the nature of relatedness must be banished from the meaning of the word " total." I mean by it an ultimate nature of relatedness.)

(20) We might look on the VALID WORK of ART as one in which the total relatedness, or the nature of the relatedness, foreshadows the nature of that integral relatedness which is postulated as the Infinite.

(21) But we find that we must split ARTISTIC MANIFESTATIONS into two *rough* groups (this for reasons already advanced and too long to repeat here) : A SUBJECTIVE and EMOTIONAL group. An OBJECTIVE and ABSTRACT group. The first would be supposed to foreshadow the indefinite complexity of the universe ; the second, the abstraction of the Infinite.

The remainder of this volume will be devoted to an examination in detail of the elements of the plastic language, and in the light of the above assumptions, which, after all, are only made with a view to clearly establishing a methodical system of aesthetic analysis of works of art into their elements of expression.

PART II

THE APPLICATION OF THE CRITICISM

XII

ARCHITECTURE

By one of those paradoxes so usual in Art, Architecture is at once the most abstract and the most concrete and practical of the divisions of our subject. In antiquity the beginnings of architecture must coincide with the earliest rough fashionings of flint implements, if, indeed, the erection of some kind of screen or shelter did not precede them. From the prehistoric additions to a rock shelter down to the detailed organisation of a modern palace there is an unbroken range of historic and geographic intermediaries. Their exposition would constitute a history of applied architecture, which would be, of course, matter quite foreign to that of this volume.

Side by side with this practical subject, sometimes one with it, sometimes almost reduced to nothing, sometimes disdaining admixture of the engineering element, runs that other pure and abstract quality of architecture that is artistically eloquent. It is of this latter only that I would speak when I make use of the word.

To separate the two parts of the subject with precision is impossible. Almost the rudest efforts at savage house building are artistically expressive of the mind of the people to whom they are due ; and the most strictly utilitarian buildings, or those prompted by evident bad taste, at least are eloquent of the absence of sense of beauty or disregard for

artistic exigencies on the part of the constructors. This raises a point to which I have not yet called attention. Throughout these pages, till now, I have passed over in silence what might somewhat incorrectly be entitled expression by negation. If the relations established in a work of art are of an unsuggestive kind, or if they suggest a petty and commonplace philosophy, it is evident that they are just as eloquent of the pettiness of their author's brain as the works of a great artist are of the immense extent of the outlook of genius. After all by the term "unsuggestive" is only meant non-suggestive of more or less wide philosophic outlook, either of a subjective or of an objective and general kind; for even unbridled emotionalism of the artistically productive kind is at least the work of a personality neither petty nor commonplace. Obviously every product of a human mind bears more or less clearly the stamp of its origin. Thus we have no genuine negation of expressive value, but only a sort of positive and negative scale of degree. As the constructed relations cease to express width of view they begin to express narrowness. But this is what everyone agrees to call absence of artistic sense, and what I have usually termed the construction of un-suggestive relations, or lack of response to the language of art as the case may be. The terminology is not strictly correct; but it is all that practice demands.

This rather long digression in the opening lines of a chapter on architecture has for reason the difficulty that one finds in separating with any exactitude the abstract from the concrete side of the subject. The separation is unusually difficult in England where mental effort is divided between emotional width of nature and the purely scientific or mathematical absence of prejudice; the formal sense being almost entirely lacking. Now the emotional outlook may produce the luxuriance of Shakespeare, the impassioned

romance of Byron, the pathos of Dickens, the confused fatalism of Turner, but as a point of departure for the execution of either sculpture or architecture it is deplorable, though it may possibly be less harmful to resulting sculpture than to architecture. This is why J. R. Lowell was able to write "he (the Anglo-Saxon) has made the best working institutions and the ugliest monuments among the children of men." Even the Celtic admixture, and French influence, have been without effect in producing other than a purely romantic and *intime* result ; the former doubtless because the imagination of one branch of the Celtic group is not of the necessary stable kind, but one delighting in the graceful but imperfect suggestion of a glass-like transparency and frail elegance, rather than in the more robust form of mental activity, which finds fit expression in stone. French influence is of course responsible for the Norman and Gothic examples found in England ; and neither Norman nor Gothic monuments appear strictly at home there, one with the soil and indigenious, as the pure, straight lines of early ogival are akin to the clear simplicity of landscape, and to the *élançées* tree-forms of their native *Île de France*. The historic question of the exact degree to which French architects contributed, in each case, to the building of English cathedrals I must leave to specialists.

Where one feels in touch with the most successful efforts of the English spirit in architecture is without doubt in its domestic forms. One cannot picture elsewhere but in England the Manor Houses of Elizabeth, the Georgian town dwellings, the bond-timbered cottages (so different from those of Normandy), and their modern picturesque derivatives, that stud in increasing red-brick numbers part of the area of greater London of to-day. The unassuming requirements, in the way of abstract beauty and intention, of the primarily practical thing that is a dwelling-house, may be compassed by the means at the disposal of an

artistic sense based on the imprecise, the emotional, the romantic.

One of the first points to strike one in this style of house is the preponderance of its colour element, its red-brick, which, aided by bond-timber and white, produces with the rich green, or in winter brown and purple, surroundings a harmony of colour emotional in kind in spite of a tendency towards complementary shock of tint. This is due to the quality of the tints used to provoke the relation, and is a good example of the impossibility of laying down verbal definitions in matters of plastic art. The complementary juxtaposition of colour, which might have been indicative of a sharply defined and formal mode of thought, is here ; but it is the contrast in colour more or less necessary to every colour scheme : it is the chromatic analogy of an emotional light and shade arrangement. The particular relations established are the result of the emotional point of view—or more correctly, in this case, as the tints are mainly those of nature, we should say that it is this tendency of the landscape which has played a part in the forming and maintaining of the British emotional and sentimental ideal. This ideal finds expression, too, in the unordered clustering of the Elizabethan chimney-stacks, in the almost haphazard and picturesque arrangement and variety in the windows.

But in all the examples of British domestic architecture save perhaps the Queen Anne and Georgian town façades, the deliberate use of that fundamental quality of great building, proportion, controlled and intentional, is absent. For this reason English architecture is never majestic. In spite of porticoed terraces of 1850, and intentional attempts at such integral unities as Regent Street,¹ the result obtained is ineloquent uniformity, instead of integral expression ; for the equilibrium established by justly and finely arranged

¹ Now being destroyed (1924).

proportions is not to be found. The proportions are correct in a certain way ; that is, they do not deliberately shock us ; but they are meaningless. However, the relative placing of the high windows and doorways of some Queen Anne houses remains in my memory as a distinctly valid plastic thought. Why this success should have occurred at that moment I am at a loss to say ; perhaps a close study of contemporary literature and painting would reveal some enlightening analogies.

The architectural successes of England, the Norman and Gothic churches, are all hardly modified importations, and with the exception of the picturesque types just mentioned, English architecture as a characterised and differentiated style and apart may be declared non-existent ; a result one would expect from a country capable of producing Shakespeare and Turner. Let me not be understood to say that there are not many beautiful architectural examples to be found in England of types depending rather on their proportions than on their picturesque qualities. But we always find that the inspiration is that of an epoch rather than of the people. England has neither invented a great architecture, like that of the middle age in France, nor has she known how to take, as France did, a foreign importation, the building of the Italian Renaissance, and remould it to a thing strictly national, seemingly sprung from the soil despite the indelible memories of its classic origin. The *châteaux* of the Loire are almost as insistently French, and at one with the landscape, as are the cathedrals of Chartres and of Amiens. An English ogival cathedral, in spite of industrious modifications of arrangement and composition, remains at variance with the surrounding forms, although it discloses in its design many of the inevitable modifications due to the influence of environment, to that influence which exerts itself even on artists foreign to the country. But one feels the changes to be only modifications. The style has not undergone the



LINCOLN CATHEDRAL. WEST FRONT

Shows indecision between horizontal and vertical development. Also fastidious repetition of meaningless detail

positive and constructive remoulding which marks so sharp a limit between the French Renaissance and its parent movement in Italy.

Let us study on Lincoln Cathedral some of the English derogations from the Gothic ideal. The West façade is expressive of one English failing. Its proportions give us the sensation of an ingeniously contrived architectural project for an academic competition. The thing is very correct (in its upper part) and very dead and plastically silent ; it is more akin to the Town Halls of Belgium in its horizontal massive extent, than it is to the elegance of France. It is developed both horizontally and vertically, and is covered with unnecessary decoration, repeated with veritable lack of invention. One feels oneself in presence of a rigid inflexible army of vertical straight lines set out in battle array and left there meaningless. The sudden abutting of the subsequent three or four first stories of arcade to the original Norman centre is unhappy, and might well have been managed otherwise. Even their sheer suppression would be a gain. With the Angel Choir the case is otherwise ; repetition has disappeared, stability replaces rigidity. The various heights of the verticals are carefully combined ; and but for a lowness of effect and an abuse, as at Milan, of pinnacles, we might almost be in presence of a French building. Yet, no ; disproportionate excess of buttress becomes apparent when we compare with the tremendous complexity—how coordinate !—of Rheims or of Amiens. At Lincoln the too evident buttresses detract from unity ; they cut, on the choir end, athwart other main compositional tendencies ; we fall back on the picturesque. Surely my thesis is plain if we confront Wells with Rheims ; or the West front of Salisbury (in which an excess of window niche is displayed, one wonders why) with Chartres, with St.-Ouen of Rouen, with Amiens. The two latter are

themes in detail. It is impossible to conceive them bereft of it. They are the detail itself ; take it away, the building disappears. Take away any number of niches from Salisbury, the result will rather be improved than harmed. Proportioned homogeneity of conception, is lacking. The basis of the Frenchman's aim is neglected by the Englishman. I trust that, before condemning my thesis, the reader will place side by side in front of him photographs of the buildings I have mentioned and, without prejudice, compare them.

Architecture is above all a clear and logical art—or rather I should say it is the art which may be made the most clear and logical. It is the art in which we have the most need of control and of studied choice. It is the art in which our means of expression are reduced to a minimum. It would seem to be, in its higher forms, incompatible with the metaphysically reflective spirit. One can only with difficulty conceive the birth of a great religion and a great architecture from one and the same race. The wider metaphysical conceptions of Brahminism or Buddhism are of an aplastic kind, they are intangible, and were so from their first Vedic origin ; or rather from their first Aryan existence, as they slowly disentangled themselves from primitive fetichism and secondary polytheism. Vastness of extent is more the characteristic of such conception, a vastness somewhat vague in the essential quality of precision. Logical and sharp definition is characteristic of such a mythology as the Grecian. The attempts to reduce the former to a visible, a tangible plastic expression result in an art wanting in control and measure ; and to an unmeasured architecture pre-eminence is denied.

In Egypt we find a naturalistic and highly complicated polytheism, though signs are not lacking of tendencies on the part of the priests, even in early times, to give a distinctly monotheistic character to their beliefs. One is not



LINCOLN CATHEDRAL. SOUTH EAST VIEW

surprised to find the deliberate and persistent visualization of the innumerable gods and goddesses accompanied by a high grade of plastic expression. But the Egyptian spirit differed from the clarity of the Greek. The conception of the Ka or spiritual double marks a greater tendency towards psychological and metaphysical speculation, which is still more enhanced by the further sub-division of the human personality into the Sechem or Vital power, the Khu or Spirit, and the Ba or Eternal Soul. Now the existence of these tendencies—on the one hand, to monotheistic abstraction, on the other, to psychologic complexity—finds its parallel in the architectural manifestations of Egypt. But we must remember that nothing is due to one single and isolated cause, nothing is moulded by one sole influence. In Egypt, the builder of temples or palaces had to deal with the most intractable of stones: granite; and to combat its hardness he was furnished with very inefficient tools. I will not attempt to disentangle the exact parts that were played in the simplicity of the general line of Egyptian architecture by the magnificent influence of the desert, by technical difficulties of stone-working and last, but certainly far from least, by the intellectual tendency of the people.

The inherent differences between Greek and Egyptian architecture are at once evident to the least observant; yet it is not easy to express their differences in general terms, without descending to detailed description. We are in contact with the impossibility of describing the difference between two groups of plastic thought, but one may do much in the way of suggestion by calling attention to one or two actual differences of form. Let us compare for a moment the Parthenon with the Hall of Columns of the temple of Amen-Ra at Karnak. The first thing that strikes us is the extraordinary sense of stability in the Greek proportions, but a stability free from the slightest exaggeration in the

direction of ponderous mass. Whereas in the Egyptian work this controlling sense of measure is to some degree wanting. The exaggerated stability of Egyptian work gives a more naïve and direct impression of immensity both of time and of space, thereby sacrificing the refined, and more universally applicable suggestion of Greece. Perhaps the most exquisite example of delicate modification is to be found in the restrained curve of the Athenian architrave ; a curve destined to be unperceived, and only to correct the seeming flexure earthwards of a long horizontal line. Greek art is continually, so to speak, a symphony in a key of straight lines, but as in a symphony the notes are not all identical, they only tend towards one end, so the Greeks usually eschewed rigid inartistic and mathematic straightness or uniformity, and contented themselves by suggesting it, by orienting all towards the end which would be meaningless were it brutally and mechanically attained. Such are the artistic manifestations of restraint. If we turn now to the Karnak columns we shall no longer find such elegant evidence of measure. The profile of the columns bears a marked impress of the spirit of a curve ; and we are surprised, on closer and more attentive examination, to find how slight that curve really is,¹ and how little it differs from the straight line of which it is so far from giving the impression. The vertical profile of a Karnak column is perhaps hardly, if at all, more curved than is that of a Doric one. The difference lies in the nature of the curves, in the relations established along their lengths ; the one suggests a greater curvature than it possesses in reality, the other a greater straightness. The philosophies of Greece and of Egypt are shut each within the flexion of a line.

¹ The rounded, re-entering shapes of the remaining bases of the columns at Medinet Abu show to a still more marked degree this tendency towards the use of the flexile curve, of a nature wholly foreign to the Greek one, and almost as empty of energy as the Hellenic one is pregnant with it.

Again, the seeming straightness of the Doric columns is brought into relation with the seeming straightness of the overlying architrave ; the whole is in a " key " of straightness ; whereas at Karnak the plastic idea expressed is the relation between columns which give a forced impression of their curvature, and the dead-straight mighty blocks that crown them. The clearness of view inherent to the " straight and measured ideal " is gone ; speculation, psychologic and metaphysic, becomes possible ; we are in touch with the religious and philosophic systems of Asia.

It may be objected that Greece, Egypt and India alike cherished a multitudinous pantheon ; and it may not be at first glance evident why three equally polytheistic forms of worship should erect such strikingly different monuments as Karnak, the Parthenon, and the Amarāvāti Tope. We must remember that all religions, especially in their exoteric forms, have a tendency towards polytheism, even if it be such a mild one as that of the Christian Trinity. So polytheism as a point of resemblance is practically without value. As soon as we begin to examine the pervading spirits of the Greek and the Indian religions, we find them to be exceedingly different. The Vedic gods are still vague and undecided, they are often confounded one with another. So often do they take one another's place that we are tempted to see in them but different forms of the same unique divinity ; or, perhaps, only different epithets applied to him. It may even be supposed that the primitive belief was monotheistic ; or at least one in a single though composite god. But such a supposition remains improbable. Perhaps these few words may be enough when combined with the memory of that intensely metaphysical abstraction, the conception of Brahma as the universal essence, to bring out the difference between the mind cast of such a people and that of the Greeks, whose tribal gods, in early times, were strictly private

property, dependent for their attributes of forging, of hunting, of seafaring, on the particular specialty of the tribe ; while to the god's name was affixed a determining geographical epithet : Hephaistos was Lemnian, Zeus Achaean. The "ingenious" Greeks had no use for Asiatic abstractions. A Greek God interposed his actual body between combatants, although he was sometimes invisible, on account of the exigencies of the situation. When the inevitable consequences of greater civilised intercourse were productive of obvious contradictions in religious observance, a result was reached which is described in Professor Gilbert Murray's phrase : " The religion had come into conflict with the common conveniences of life, and had been beaten." It would be difficult to write such words of India, even at the present day.

Egypt, as its art would lead us to expect, takes a somewhat intermediate place. The art of the Nile valley is more controlled than the metaphysical one of India ; yet it is easily surpassed in measured clearness by that of the logical Hellenes, which was destined to inspire directly or indirectly so much of subsequent European architecture.

First, the Romans drew from this consummate source that was Greece, a modified architectural style. Then, more than a thousand years later, and sprung more immediately from the romanesque of mixed Byzantine and Roman origin, came the almost entirely novel type, the Ogival or Gothic ; and in it we find one of the most perfect transcriptions of that French spirit so curiously allied in many ways to that of Attica.

The French mentality has been well described in its essentials by Lanson in a passage of his *Histoire de la Littérature Française* as being at the same time incapable of the more advanced and poetic forms of metaphysical abstraction, and capable of following with clear precision, of enodating the most complex and ravelled skeins of reasoning. But a mere

description of this spirit is not in itself enough to account for the formation of an architecture especially religious in its origin and applications. The conversion of the *plein-cintre* of the romanesque to the broken ogive, and the concomitant system of flying buttresses, was largely brought about by the failure of the *plein-cintre* arches to resist the pressure of the weight of more ambitious edifices.

In the middle age intellectual effort was more closely united throughout civilised Europe than it is perhaps even to-day, despite the modern facilities of travel. One language, Latin, was common to all educated men. The same centres of learning were frequented by scholars of all nationalities. Letters, as we all know, were the particular appanage of the clerical order ; and the centralisation of the Catholic religion had more than a little to do with the regular geographical distribution of knowledge. Now mental activity during the middle age, when religious belief was a far more real thing than it is to-day, was above all directed into two channels ; the one religiously mystic, to which we owe the heritage of such works as *The Imitation* ; the other philosophically speculative, which had given rise two centuries before to the famous discussion between the nominalists and the realists. Nor must it be supposed that classic literature waited for its rediscovery till the dawn of the Renaissance. Already in the twelfth century, and earlier, Aristotle was read in the schools. Thus we have from the opening of the middle age Christianity and the offspring of paganism each contributing to the forming of the spirit of the time. It is more correct to divide the history of thought into three stages during the middle age : the first that lasted till the end of the twelfth century, when philosophy was completely subordinated to theology ; the second more especially embraced by the thirteenth century, when theology and philosophy advance hand in friendly hand ; and third,

last before the "new learning," and which has its end in 1500, a period during which philosophy detaches itself more and more from its theological *confrère*. To the second of these three periods belongs the transition from sturdy, massive, romanesque to the frail-seeming ogival tracing of idea in stone—an enduring victory of thought over material tendency. In the third epoch we see a new proof of that mysterious linking between the plastic arts and the purely consciously intellectual condition of a people. The religious Gothic becomes flamboyant. As logic and philosophy pursue their path more and more apart from that of religion, the directness and objective element vanish from architecture, or rather, become more and more obscured by that subjective and emotional state which made possible, in and before 1441, the writing of *The Imitation*.

It is not then surprising to find in the lines of Chartres a subtle and perfect fusion of two ideals. The success is due to the perfection of the fusion, the hesitation that we feel to accord so high a place to the Cathedral as to the Parthenon is due to the inherent weakness of the double aim. However perfectly the fusion be accomplished the obscure presence of the basal duality still haunts the perfection. "*Dentelle de pierre des cathédrales, roses éclatantes des verrières, fresques vivement coloriées où se déroulaient mille histoires merveilleuses, riches orfrois, brillants émaux des chasses et des reliquaires, ors des croix et des ostensoirs, constellations des cièges dans l'ombre des arceaux, grondements harmonieux des orgues*" writes the lyric pen of Anatole France, but his exquisitely developed sense of artistic value prompts him at once to add "*Tout cela sans doute, ce n'était point le Parthenon . . . mais cela riait aux yeux et aux cœurs; c'était encore de la beauté . . .*";¹

¹ Stone lace-work of cathedrals, the windows' radiant splendour of many-tinted glass, a thousand wondrous histories unfolded in gay fresco tones, rich orfrays, brilliant enamels of shrine and reliquary,

while the spirit of his mockery dictates the literary figment of the pagan gods working in unison with man at the construction of Christian temples. The metaphor is not so far from the truth. Aristotle, as well as the gospels, had a hand in the making of the age, a hand in the building of those soaring vanes, at once clear and logical in constructive conception, and mystic in depth of luminous shade and insatiable aspiration towards the distant sky ; an aspiration that makes of the long vertical line a dominating note. The straight line still plays a leading part in the symphony. But its entire pre-eminence is undermined. It breaks and passes through a subtly established relation, into the nervous curve of the ogive ; a curve that seems almost unable to resign itself to being one ; a curve more curved than its invisible Greek sisters ; less so in suggestive nature—though more so in geometric reality—than the Karnak columns, which generate a sense of almost flaccid roundness. We are again in presence of an artistically valid relation established by a certain domination of straight line and of curve.

A new example of the inadequacy of verbal description in matters of plastic expression here presents itself. What has been already said on the universal presence of the elements of artistic expression must be remembered. Undoubtedly the columns of the Parthenon are round in section, and their roundness is essential to the whole ; but its effect is, so to speak, on the second rank of relational systems, and not on the first one, as is the curve of an ogive when it is contrasted with the straightness of a column. One can draw a tolerable representation in straight lines, without the use of curves, of

gold of cross and of monstrance, constellations of tapers in vaulted shade, harmonious thunder of the organs . . . but none the less it was not the Parthenon, though it laughed before the heart and eye ; even yet it was beauty (*La Revolte des Anges*).

a Greek temple ; but the ogive curve is a primary necessity in the most schematic representation of a Gothic cathedral. The difference between the Greek and the Gothic in this matter is not in the total absence of round forms in the first, but in their lesser importance in the production of the relations.

It would be useless to attempt to dissociate, in so homogeneous a whole as a Gothic building, the expression of the logical and of the religiously mystical sides of the character of the age. Both are expressed in the quality of the same line. The unbroken, soaring length of the columns of a nave may express the tenuous dreams of mysticism, that ever strive upward towards the ineffable, towards the unthinkable ; as well as that clear measured love of order and formal rigidity, so openly displayed in the fine springing of the subsequent vault. What the established relations really express is neither the mysticism nor the logic, but the view of the curious fusion of the two. Just as philosophy and theology were allied during the century, which saw the birth and most masterly productions of Gothic art, so we find the mechanical logic of flying-buttress, and the cunning distribution, by means of ribs, of the vaultings' weight rendering possible an expression of the limitless aspirations of mysticism.

In another way the world's thought has changed since the less doubting days of Greece. The love of beauty, even though measured, has been condemned ; suffering and asceticism have been extolled in her place. But the desire for loveliness is too deeply rooted in humanity to be extirpated by religious doctrine ; which has proved strong enough, however, so to modify the minds of men as to change, if not wholly the direction of desire, at least the power of production. The differences between the classic ideal of plastic beauty and those of the Middle Age and of the Renaissance will be better treated in their manifestations in the human form in the



CHARTRES CATHEDRAL. MAIN PORCH

Shows architectural stylization of figures. The figure specially mentioned is on the left of the plate. Should be noticed how the circular forms round the head are supported by, or run off into, the straight lines of the body

chapter on Sculpture ; for there they are more tangible and obvious ; here I will only call attention, in a summary way, to the main difference in the use of added ornament in architecture. In Greek building, sculptured ornament is strictly an added thing, unless we take into count one or two rare and not wholly satisfactory exceptions such as the Cariatides of the Acropolis. The Doric column is quite devoid of unnecessary complication ; the Ionic nearly so ; and it is only in the comparatively rare Corinthian capital that licence is given to important lines of the building to break into varied complex tracery of foliage. Metopes and friezes in relief occupy definitely marked off spaces ; they may almost be said to be framed. Statues in full relief are placed completely detached, in suitable places reserved for them in the architectural whole. When sculpture in relief is allowed it is generally kept as flat as possible in order not to destroy the main idea of the surface, and to maintain the feeling of an added decorative motive running lightly over the principal mass of which it does not form an essential part. Even in the earliest and purest Gothic buildings this pre-occupation with the integrity of main factors no longer exists. The figures of the chief entrance of Chartres are indispensable ; the naturalness of drapery folds, or of pose, or of proportions has been modified in a consummate way to meet the architectural requirements ; for the figures are one with the porch. Unlike the figures of the Parthenon, Gothic sculpture can rarely be separated with success from the buildings into an integral part of which it is modified. The straightness of the column before it passes into the curves of the groined roof hesitates a moment among the almost disordered foliage of a capital, beside whose flexible forms the Corinthian is Doric severity itself. It is needless to add that this confusion of decorative with primal form rapidly increased as the style developed towards the flamboyant. The relations are no

longer clearly and simply established, and of far-reaching universal import, objective in kind. A doorway is now opened to the subjective and emotional, to the romantic ; the naturalness of Gothic sculptured leaf-form can incite the praise of a subjective Ruskin ; the forms that interrupt the main development of line have not been tempered in the pure objective fire of Greek thought ; indefinite extent is already subjectively perceived ; the errors in scientific reasoning that the Greek mind made ¹ will be made no longer. In three or four short centuries Newton will invent the calculus, and Descartes will pose the bases of mathematic analysis.

NOTE.—There may be misapprehension concerning my view of English architecture. To sum up: environment, mentality, architecture are homogeneous and interacting. Hence architecture harmonises with its surroundings. English architecture does so. English mentality and landscape are lacking in *ensemble* (as is the vocabulary in designation of the idea). English people are not conscious of substitution of a variegated picturesque for the formal sense. Till now in architecture this has been no detriment. Will it be none now that we have to deal with modern, unpicturesque, commercial town buildings? I cannot but think that a serious confrontation of half a dozen English cathedral façades with those of Amiens, Chartres, Rouen and Rheims, will convince the reader of the homogeneity of design and detail in the latter series, and the heterogeneity in the former. At the same time it may perfectly well be that the transference of Chartres to Salisbury would be an act of incoherence. I am writing on general aesthetics, not on the English view of art for English surroundings.

¹ See Whewell's *History of the Inductive Sciences*.

XIII

ARCHITECTURE—*continued*

BEFORE continuing the discussion of the quality of architectural form, and its aptitude for transcribing mental states, it may be as well to make a short digression in order to study more carefully a point which is not often raised in England. Later on, in the consideration of certain qualities of drawing, we shall have occasion to return to it.

When we attempt to describe in words the more delicate and refined qualities of architecture we are struck by the absence, especially in English, of words or phrases to denote differences of plastic quality. The English tongue is particularly rich in epithets concerning subjective psychological differentiation, but the unfortunate writer on plastic matters finds his vocabulary non-existent. We all understand at once what kind of facial expression is meant by a "wistful" one. Let the reader imagine for the moment that the word does not exist; but let him retain a clear image of its meaning, the idea half visualised that presented itself mechanically to his mind when he read the word a moment ago. Now let him describe that idea in other words. I turn to the word in Webster's dictionary. I find as the second and current meaning: "Eagerly attentive; engrossed; hence, sometimes, with desire or longing; wishful." Surely every English reader will feel that in this description the whole essence of the word's meaning is lacking. Think of the

totally incomplete idea of the word a foreigner would glean (and *glean* and not *harvest*, is the word) from such information. Worse : tell me to translate *wistful* from subjective, complex, vague English into definite, precise, logical (and consequently somewhat objective) French. I fall back on *attentif* or on *pensif*. This is, of course, why Shakespeare cannot be translated into French. England has interested herself in a certain series of sensations and has perfected her vocabulary in that direction ; but has not done so in certain others which have never attracted national attention, and of such are all matters connected with form (" *la forme* " I mean), that peculiar continuous essence of the aspect of things that is not to be confounded with the general arrangement or composition, that quality which is to be found, for example, in every line of La Fontaine, and which is neither composition nor style. Just as it is impossible to define in English the exact signification of such a word as " wistful," so, in French, is it impossible to give the meaning of " *la forme* " except by a use of the word itself. Littré gives, amongst a page and a half of other meanings : *principe distinct qui donne la manière d'être aux choses* ; and farther on : *manière d'agir, de s'exprimer*. This latter use of the word he confines, at least in the sixteenth meaning in question, to matters of social deportment ; but it may of course be extended to any kind of action. It may be instructive to draw attention to the way in which England has restricted and impoverished the word when used in the last sense. The Frenchman uses the word as the name of an essence which must be accompanied by a qualifying adjective either expressed or understood. We may say with equal correctness : *Il a les formes distinguées* ; or *Il a les formes rudes*. In English the substantive, in this use, has disappeared, not being wanted to express an idea that we hardly use ; though it may be objected that we use the phrases " good " or " bad form." However, here we may

replace the word " form " by the word " manners," scarcely altering the sense by so doing. But to say, that Anatole France is a master of " manners " is absurd. Here we deal with an evidently different meaning of the word " form." Again the adjective in : He behaved in a formal way ; has come simply to mean that his manners were stiff and uncomfortable ; that is, the word means a particular and definite way of acting and no longer the essence of different ways of acting, which is a species of idea that has little or no currency in England. But to approach our subject more nearly. Supposing we speak in English of a *heavy line*, I think I am right in saying that the idea evoked is one of a thick black line ; that and nothing more. Translate word for word, into French, we have *une ligne lourde* : but the meaning has entirely changed. A thick line is *une ligne épaisse*. The meaning of the phrase in each language is the same. Why ? Because we are dealing with a tangible fact, the measurable width of a line, a reality which people of all nations and casts of thought can grasp. But *une ligne lourde* is a very different question ; it may be physically thinner than one very much less *lourde* or not *lourde* at all. The adjective *lourde* applies not to the physical qualities of the line, but in reality to its action on the sensitive personality which its essential character oppresses. If the national personality is but slightly, or not at all, capable of being oppressed by the essential character of a line, naturally this meaning will never be attributed to the combination of the two words meaning separately " a line " and " weighty." Further, the nation will not perceive the existence of such an essence capable of being " heavy," or the contrary, any more than the human eye perceives the existence of ultra-violet rays ; although the photographic plate does so. The comparison may not be strictly correct ; for though the English and Germans seem to be as nations, lacking in *sense* of " *forme* " I believe

both fully realize the difference between a French woman's way of dressing, and that of a German or English woman, but the presence of that quality of French expressive *forme* would seem to be distasteful to women of other nations, for they at once eliminate its subtle presence from their modifications of Parisian fashions, even when the dress itself is bought in Paris. It would seem a far cry from Gothic Cathedrals to Paris dress-making, yet the two subjects are closely allied. The *esprit* which governs the *rue de la Paix*—if exception be made of the unhappy Teutonic invasion of its precincts in recent years—is the lineal descendant of that which erected the great churches of the thirteenth and fourteenth centuries in the *Île de France*. The same sense of reticence and elegance of intention pervades the *ligne* of the dress of a French woman of refined taste, as validates the spring of a Gothic ogive, and the delicate relation to its upholding column.

Were the subject of the essence of line and form more studied in England one might ultimately be able to use such phrases as *expressive form*, *reticent form*, *heavy form*, *measure*, and so on with the same certainty of being understood as one has when speaking of a "wistful" expression.

This, then, is the difficulty with which one is confronted when one tries to distinguish in words between the relations established in a Gothic ogival doorway, and the not less lanceolate one of an Arab tomb beyond the walls of Cairo.

In the photograph now before me, one of a Cairo street, figures a semi-circular headed doorway flanked by two almost Corinthian columns supporting an architrave. The whole would hardly be out of keeping in a romanesque church of France. One is reduced to the smaller proportions, to distinguish between the results among different peoples of that architectural influence that radiated from Constantinople in the last centuries of the Empire of the East, and

before it waned as a Christian centre. This is especially so when we take into account the subsequent reaction of the West upon the Levant, at the time of the Crusades and after, as exemplified in Saint Sophia of Nicosia, and Saint Nicholas of Famagousta (both in the Isle of Cyprus) ; not to mention monuments in Rhodes and elsewhere. These pure products of occidental architects undoubtedly formed a school and object lesson to the Levantine builders.

The expression of logical directness and of measure would seem to be the state to which all the greater occidental manifestations of architecture tend, and attain in differing degrees.

Unless we feel the necessity of a sense of reticence and measure we fail to understand the unsuccess of Milan Cathedral. Classic Rome reproduced the translucid art of Greece; but the elegance became massive; the diamond-edged keenness of Greek things was blunted, the relation between the rounded arch and surrounding straight lines was cultivated; impressive grandeur rather than perfection and directness of intention was aimed at. Milan is another, though this time a quite unsuccessful, attempt on the part of the inhabitants of the Italian peninsula to utilise an art depending for at least one half of its validity, on the clear shock of measured forms. The outward semblance of Gothic shapes is at Milan, as it is at Orvieto or in any other of the Italian Gothic churches, but the intense meaning of the proportions of the *chef d'œuvres* from about the Seine valley is lacking. Milan Cathedral remains a squat mass over-burdened by an inordinate number of thin vertical lines which, far from bearing an artistically valid relation to the general form, seem to bear no relation to it at all. The mixture of Renaissance and pseudo-Gothic shocks; not, mark you, because it is a mixture, but because the fundamental sense of eloquent plastic validity is absent, or at least is very largely absent, in this

case. The Gothic was a natural product of the French sense of form. Elsewhere than in France it was not fully successful. At Milan we find it combined with the Italian Renaissance, a production of the more languid, less valid and eloquent Italian plastic sense. The result is incongruous. The Italian formal sense, being a less powerful one than the French, has been unable to Italianise French Ogival into a new and original thing. The French sense was able to convert Renaissance architecture to a national manifestation ; although its origins were imported ready-made from Italy.

We can see an example of the dominating power of the valid sense of form in the marriage of the flamboyant ¹ spire of Chartres to its early Gothic ² fellow, and to the rest of the building. In spite of three or more centuries' interval the saving restriction of that sense unites the two styles. St. Pierre at Caen, by Hector Sohier, shows the suppleness of French ingenuity in passing from Gothic to Renaissance data without showing shock or discrepancy. At Milan Italian Renaissance and Italianised Ogival remain a non-integrated mixture.

The most successful monuments of the Gothic period in Italy are the Florentine palaces, in which the elements usually associated with the ogival style make only the scantiest of appearances. Of all architectural styles—at least of all European ones—the ogival lends itself most easily to abuse and to giving the appearance of what is called in French *une pièce montée*. Indeed, its rapid decline, in its own land, from pristine purity and beauty, is proof enough of this unhappy tendency. It is in vain that we seek, among the unconvincing forms of Gothic Italian ornament, that nervous and eloquent intention which inspires the best French work. In the peninsula the curves seem wanting in

¹ Architect : Jean Texier de Beauce, sixteenth century.

² Built between 1145 and 1170, *i.e.* twelfth century.



CHARTRES CATHEDRAL, WITH THE TWO SPIRES

300 years separate the two spires. The plan was continually modified. The narthex was suppressed. A detached tower was included in the façade. The whole, extending over the twelfth, thirteenth, and sixteenth centuries, is nevertheless harmonious

swiftness, in decision, and in clarity.¹ The palaces of Florence fall back, however, on the imposing grandeur of almost unbroken surface, and on a splendour of large proportion ; by which they stand almost in the same relation to the French Gothic as the ponderous magnificence of Rome bore to the delicate glory of Greece. The keen sense of France for form, or the still keener one of Greece, has always been wanting to the inhabitants of Italy of every date, if we except of course the purely Greek inhabitants of the extreme south in pre-Christian times. There are perhaps few better examples of the failure of even classic Rome to follow the nervous *spirituel* path marked out by the Hellenes, than the sudden change that we find between the Roman silver coins of Capua struck by local Greek artists, and those subsequently struck at Rome itself by Romans.² Italy has always held the intermediate place ; in that case she tinged and enervated with vague sentiment, or rendered heavy with unmeasured pride, the crystal-clear visions of the Greeks.

Passing allusion has already been made to Arab architecture, to certain superficial resemblances that it has to the ogival. In reality the two ideals are as far apart as possible. We have also considered in a summary way, the cult of the straight line in Greece ; and, to a less degree the not com-

¹ Ruskin, almost, if not quite, inappreciative of eloquent form, did not of course observe this lack. He praised the closeness of natural study ; he wrote inimitable prose about that massed, varied and glowing confusion of ocular delight that is St. Mark's at Venice ; but the judgment he always applied to architecture is an emotional, a sentimental, a subjective one. It was the want of appreciation of a whole side of art that led him inevitably into the self-contradictions and confusions of idea, that detract from the value of the romantic beauty of his fervid phrases.

² Some of the first coins struck at Rome are the work of Greeks who doubtless came to Rome after the closing of the Campanian mint.

pletely efficient striving towards it in France. In both cases we must understand a straightness of intention, a subservience of the curve to the straight, a nervous straightening of the curve, rather than the mere fact of the employment of really straight lines. The straight line is a practical concomitant of almost all architectural styles if we except the igloo of the Eskimo, or the round huts of certain central Africans; and such elementary attempts. As has been indicated above it is not the straight line itself that counts, but the relations established between it and other factors; and as these relations vary in nature, they change, by a reflex action, the appearance of the lines to which they themselves are due; just as the greenish-blue tint of a painted sky becomes bluer and palpitating by the reaction of the relation established between it and the tints of the foliage painted against it, when (and only when) the said relation is an imitatively valid one; that is, bearing a definite proportional relation to the real aspect of nature.

An Arab mosque may well be constructed of a dome supported by rectilinear basal forms; but such is the nature of the relations established, that we carry away from such a building what, for lack of a better phrase, I will term a curved impression. Even the straight slender Muezzin Minarets of the Great Mosque of Cairo seem to associate themselves with a sense of unnervous roundness; and as the memory of the curves of Gothic work effaces itself behind that of the swift straightness of total intent, so we forget the real straightness of certain Arab lines and remember rather the indolent curves that impose their quality on the right lines about them. We are no longer among a logical people inclined to follow and unravel a single thread of reasoning. We are with the members of one branch of the oriental group; the mode of thought has changed; the active logic of the west has given place to passive fatalism. The Mussulman

philosopher strives by means of *El-fana* (the submerging or extinction of the personality or at least of its inferior parts) to reunite contrasts and antinomies which are the very basis of occidental logical reasoning. It is not, then, surprising to find practically necessary straight lines of buildings losing, by engendered relations, their directive tendency. This mental position is more strongly marked than ever in Indian philosophies ; though, at the same time, it is modified by other characteristics of which the examination would, here and now, take us too far afield. All one can hope to do in so limited a space is to call attention by one or two examples, to the inevitable expression of the mind position of a people in the relations established in its architecture.

There is, however, one other side of the question which it would be wrong to leave so scarcely mentioned, even in such a summary treatment of the subject—I allude to the landscape origin of architectural conceptions. This influence of landscape environment, it must be remembered, has also played its part in the mind formation of the people inhabiting each particular part of the globe. The burning suns of the African or Arabian deserts do not produce the same philosophical outlook as do the cold mists of the north ; nor do the infinite spaces of Egypt or Assyria act on the brain of the inhabitants in the same way as the luxuriant complex jungles of southern India.

Architecture may thus, in a sense, be looked upon as doubly influenced by its environment ; first, through the mental position of the artist ; and secondly by the more immediate suggestion of forms to be used ; to which latter may be added, as a kind of corollary, the necessity of maintaining a harmony between the building and its surroundings.

To begin at home, the attentive observer will easily remark that the straight line, as a successfully employed factor, dominates less in English Gothic than in French. This is

undoubtedly due in part to the smaller, more rounded, less direct, more picturesque forms of the ambient English countryside, which, in their turn, have not been without influence on the English mind.

The desire to complete the natural forms in a direction lacking to them would seem not to be without force in modelling architecture. The aspirations of the towers of Malines or the spires of Chartres, so imposing in the horizontality of their native plains, would be inconceivable in an Alpine valley, where the wide spread roofs and general horizontal tendencies of the chalet seem to give a satisfying equilibrium. In Greece too, country of mountains, though only of an intermediate height, the general insistence is on the horizontal ; while the desert conceives the would-be mountains of the pyramids. The immense proportions of Egyptian work are also an immediate result of its desert environment, whose limitless extent dwarfs, in appearance, every human effort.

Not only in the building itself, but between it and its surroundings, must be established valid relations. The non-existence of these relations between a greco-roman portico and the rest of a London street is probably not the least active factor in determining the failure of effect.

As a rule the architectural style is fitted only to the creation of valid relations with the actual surroundings of its particular cradle. Gothic architecture is already out of place in Provence, where Romanesque is more at home. The forms of the Parthenon are only at their best among the hills of Greece. But it would be tedious to continue the list.

One style of architecture is, however, notably flexible in its adaptive power ; it seems in this respect to be based on somewhat different principles from those of the others. I speak of the Chinese. Viewed from the technical aspect, which is of course outside our present province, this faculty of adapting itself to its surroundings that Chinese archi-



PAGODA, YUAN MING YUAN

Shows the remarkable adaptability of Chinese architecture. The forms of the building associate themselves as intimately with the surrounding landscape as do the very different shapes of the Lo-Ko Ch'iao bridge with their environment

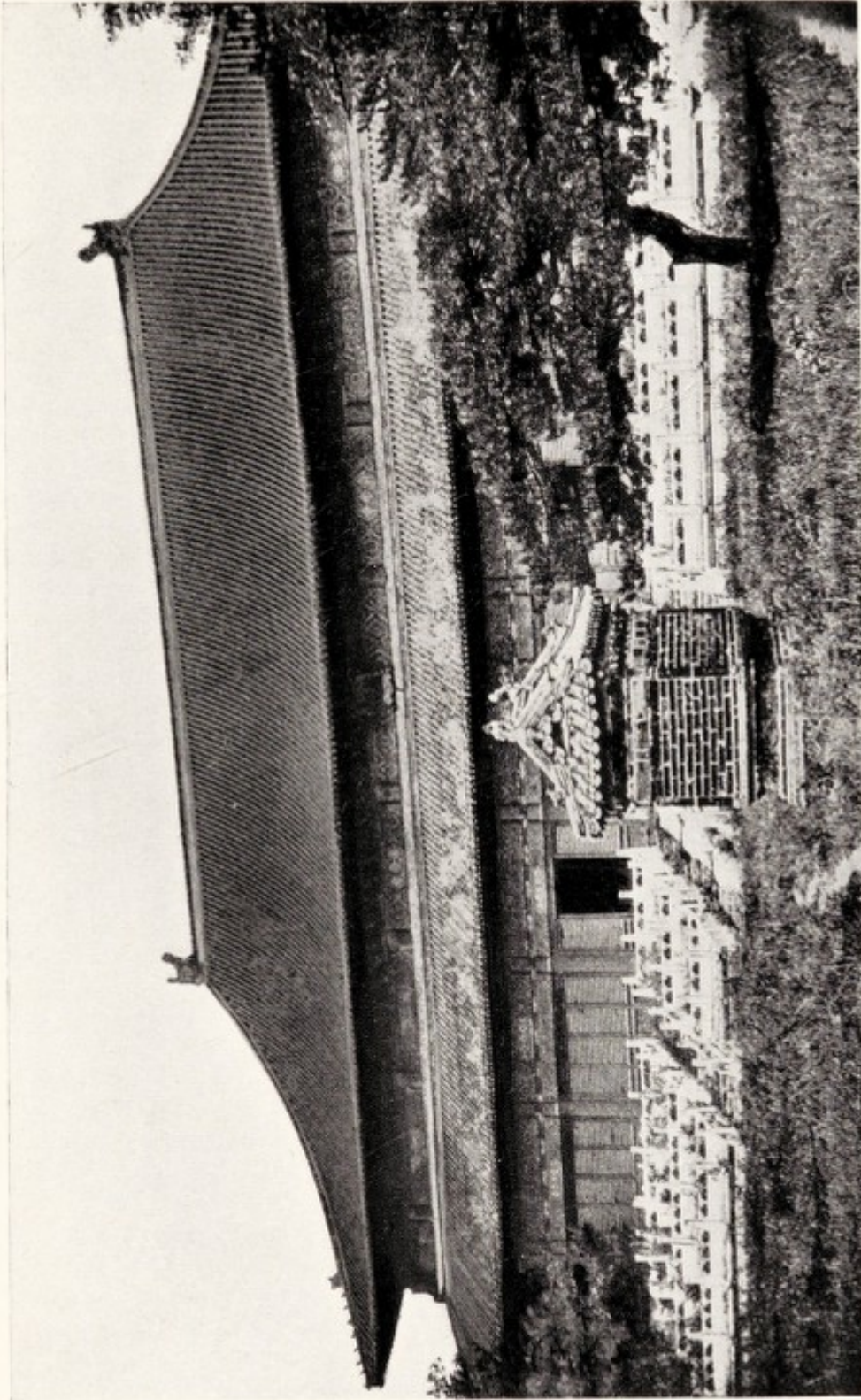
ecture possesses would seem to be largely due to the unusual importance given to the roof. In reality, house or temple design reduces itself to a roof (or several superposed) supported by columns; the walls merely fulfill the office of closing the interspaces between the pillars. This arrangement allows a roof to be developed in horizontal length like that of the Sacrificial Hall of Yung Lo near Peking; or mounted in the elegant vertical repetition of the Pagoda at Yuan Ming Yuan that seems to repeat in spirit the tree forms of the surrounding conifers. Such a style as that of the Greek temples is wedded to certain definite relations between the vertical and the horizontal, from which it can only be varied with great difficulty—or rather one may say that it cannot be varied from them, for such monuments as that of Lysicrates at Athens, the Mausoleum, or the Roman monument at St. Rémy-de-Provence, are really only cases of deliberate elevation on an added base. Even the more supple Gothic clings to its verticality; and however much the nave of the church is elongated, it is never the horizontal character of its length that impresses us; the sense of horizontal is always dominated by that of verticality.

Perhaps the most important element of expression in Chinese architecture is the curve. The Greek ideal displayed itself in the straight line; the Gothic in the double use of both straight line and curve; the Chinese skilfully creates relations between curve and curve. The Romanesque curve was limited to the arc of a circle; it was a constant; and only the proportional height of sustaining column and span of arch could vary. The Gothic curve enjoyed a slightly greater licence, but still remained enclosed between certain narrow limits. When we reach the Arab curve we begin to find greater freedom and the use of double sweeps; but it is reserved to the Chinese mind-cast to express itself freely by the juxtaposition of curves varied and exquisite in their

Chin
cur

relations. The curves of China succeed in being elastic and living, and of changing movement, without employing the ogival method. The ogive continually strives towards the straight. In China, lines are content to remain purely curves. The equilibria established are between curve and unexpected curve. One of the most beautiful and expressive examples is that of the celebrated hunch-back bridge, Lo-ko Ch'iao, of the Imperial Summer Palace ; the flexures are astounding in their delicate beauty, especially when one remembers how difficult it is to escape the vulgar meaningless sweep of some of the recent horrors due to the movement known as *Art Nouveau*, whose lines may be looked on as the plastic equivalent of the air of a popular music-hall song. It is not quite correct to say that it is difficult to escape such pitfalls, because for us it is impossible ; the higher forms of European thought demand other plastic expression ; the bridge of the Summer Palace is a *natural expression* of distinguished Chinese idea. Here again not only is the unexpected originality of the curves beautiful in itself, but the whole is fitted in a most extraordinary way into the natural lines of the landscape, those of the trees, those of the distant mountains. The arch is a triumph in lightness of effect. It is almost inconceivable that one and the same art can suddenly present itself in the form of the ponderous memorial arch of the Temple of the Sleeping Buddah, also near Peking. The arches of the latter are sturdy semi-circles supporting a heavy super-incumbent mass, again crowned by rectangular variations. By bringing together such different elements may the artist arrive at generating similar if not identical relations.

I must at least mention one other important factor in Chinese architecture, namely colour. Only the traveller can realize the effect of the amazing polychromy of the Chinese buildings ; the colour arrangements seem to take precedence



SACRIFICIAL HALL OF YUNG LO, NEAR PEKIN

Shows how Chinese architecture is free to develop horizontally on account of its emphasis on the function of the roof. Small roofs superposed give the pagoda (Plate facing p. 154). Note, again, how tree to right harmonizes formally

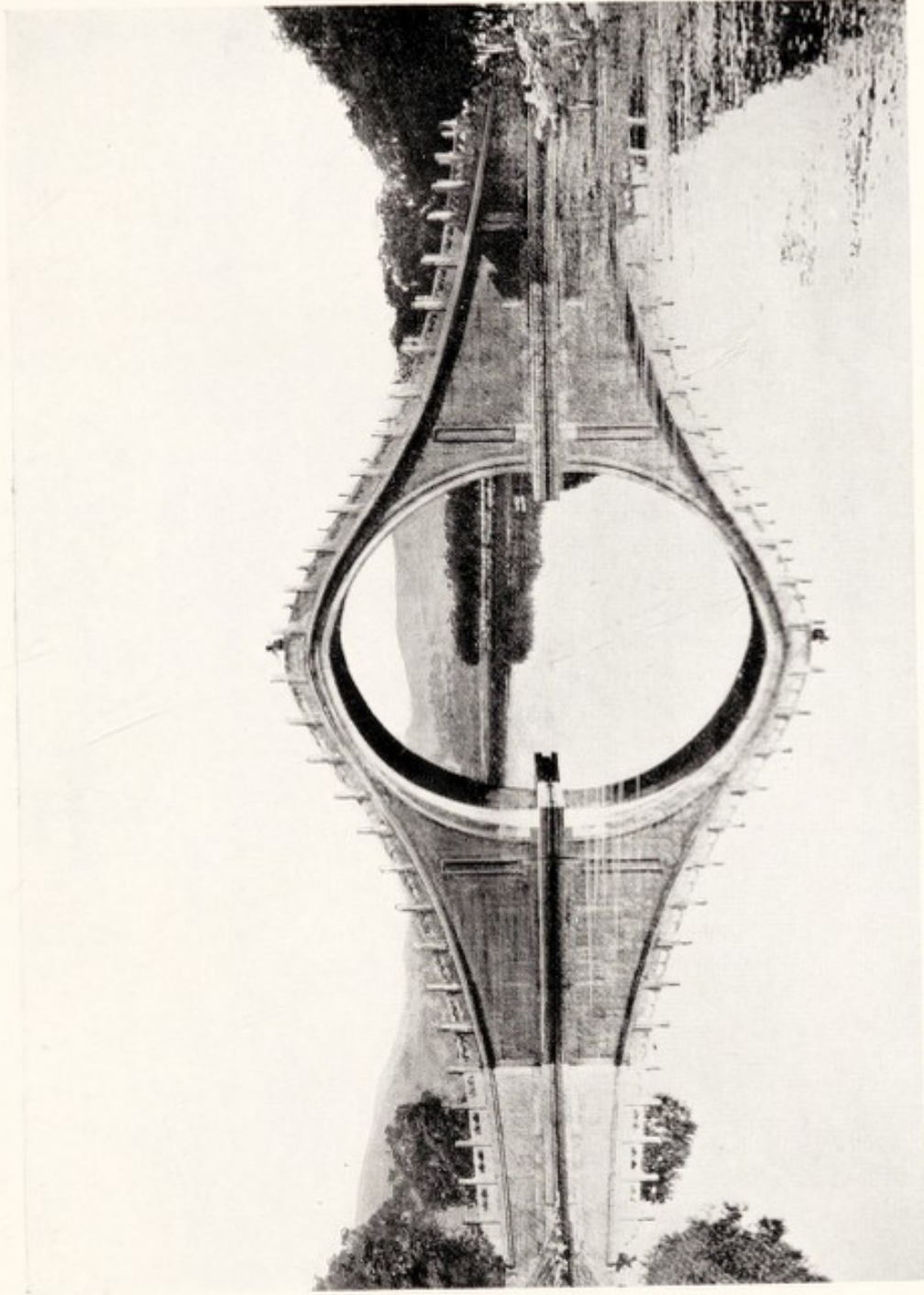
over those of form. The colour idea of the Greek or the Gothic work was always subservient to the form. Here as expression, colour is raised to an equal level. Unlike byzantine and arabesque colour, unlike the confused wealth of India, the colour ideas of China, as shown in her architecture, are clear and decided in type. Although lacking in Grecian simplicity they are in no way confused.

Perhaps while speaking of colour in architecture, I should warn the reader not only against the current colourless conceptions of Greek work, but also against the gray one of the Gothic churches. The Tuscan Gothic Cathedrals—Orvieto, Siena and others—give, in a way, a better idea of that “white robe of new churches” of which the eleventh century chronicler speaks as covering the rags of France, when once the fear of the year 1000 (foretold as the day of judgment) was passed, than do those same buildings themselves now gray and colourless with age. It was said, it is true, of romanesque churches and not of Gothic ones, but the division is arbitrary in this case. It was not then that the taste for gay colours and dress died out; though the rapidly decreasing wall space of the later Gothic forced the painters of the time to decorate already existing romanesque churches or to turn their attention to stained glass design. The recently discovered (1890) decorations of Cahors are striking examples of the mural painting of the thirteenth century. Remember the gay colour of the literature of Chaucer, of Guillaume de Lorris, the flowers, the many tinted raiment of the time. Remember, as well, the brilliant whiteness of the new-cut stone then rising in light form against the sky. The various tinted glass is with us still; but the frescoes, the painting and gilding of the figures, in the porches, have been unable to resist the inclemency of the northern climate. The interior of Notre Dame La Grande at Poitiers should be studied by the curious. It has been much restored, much repainted and is of course

romanesque and not Gothic. The "cool gray of Gothic things" is an invention of the nineteenth century. The phrase would have been meaningless to a thirteenth or fourteenth century listener. In studying the plastic works of a past date we should always strive to eliminate as far as possible such sources of error before establishing our appreciations.

It is with regret and an intense feeling of their insufficiency that I close these two chapters in which the wonderful achievements of Gothic architecture have been made to figure under the exiguous aspect of a relation between a column and a curve ; in which the Parthenon takes the shape of a horizontal arrangement of straight lines ; in which the stupendous building of Egypt is passed by with hardly a word ; in which the unique architecture of China, based on a cunning marriage of the subjective and the objective—at least of the eastern equivalents of these words—is hardly more than touched upon. So different indeed is the ideal of this art from ours, that it more than all the others would require a letterpress and system of illustrations more than worthy of an additional volume. All European work retains a subtle and fugitive memory of its ancestor the Greek ideal of straightness. Ethnic differences, differences of epoch, have sometimes so modified this aim as almost completely to obscure it. Still, an absolute and perfected expression by means of balanced and changing curves remains strange and impossible to the moulding of our minds.

It would be tedious to make out a list of the innumerable styles, all more or less interesting, that have been passed over in total silence. Buildings exist in every country of the world though many, those for example of the Malay Peninsula, are wanting in real architectural interest ; they hardly express more than the practical necessities of the



LO-KO CH'IAO BRIDGE. IMPERIAL SUMMER PALACE. NEAR PEKIN

Shows valid use of curves in architecture to express a certain type of mind form. To be compared with certain disastrous European uses of double curve

situation, and the exigencies of convenient material. This last observation is not strictly correct ; the climatic conditions and the materials at hand in tropical Africa are much the same as those of the Malay Islands, yet the two styles are obviously different, not only in the evident Malay habit of building on piles, but also in the design of the houses. Discussion of such differences would perforce become a study of Ethnic Philosophy ; one, by the by, which merits perhaps more attention than has been bestowed upon it.

I may be more severely criticised for the omission of such established recognized and valid styles as the Assyrian. My excuses must be the multiplicity of illustration necessary to render the text comprehensible to others than the specialist, the repetition of the same arguments each time a new and important style is examined with any degree of care.

After all, the object of this volume is the indication of a way of co-ordinating the qualities of different artistic manifestations. It is not an examination in detail of those manifestations. Each time a certain number of examples is studied in one or two of their details, in order to render the purely theoretical development a little more concrete and tangible ; but the reader must apply for himself the analytic methods that are unfortunately indicated in so summary a way.

A more real and reprehensible gap in this chapter is the failure to treat what is after all the main architectural factor—I refer to expression by means of mass equilibrium. I have often spoken of line. Line is in this case but the profile of mass. So what has been said of line may generally be bodily transferred to mass, or would it be more correct to say volume ? The physicist will appreciate the difference here made. What really satisfies the eye in architecture is the apparent volume ; but at the same time the satisfaction is due to our experience of the equilibrium of equal (or of equipotential)

masses. It is not easy to examine the difference between our sensations within and without a Gothic Cathedral. Seen from the outside it is certainly a matter of indifference to us whether the building is a solid mass of stone or not. The external arrangement must then satisfy the needs of such a mass were it solid. But once inside we have many opportunities of realizing the thinness of the walls. Our appreciation of the relative arrangement of column and ogive rib is slightly different : it is more detailed, more given to following the directions of differing systems of line ; though after all the principle is the same, whether the masses in equilibrium be the great ones of the exterior or the lesser ones of interior columns, and the now obviously thin walls. I have devoted some little examination to the question of expression by mass co-ordination in the chapters on Sculpture. In the latter art the possibilities of arrangement are more varied than in the more restricted one of architecture, where, for example, overhanging or impending mass is but rarely admissible. I must leave with regret an examination of the mass problem in architecture perhaps to a future date. It is a subject more than worthy of a separate study.

XIV

SCULPTURE

SCULPTURE might be defined, as a whole, as : An art which consists in choosing and combining, in different ways, constructional facts of the living form in order to produce rhythmic arrangements fitted to express the manner of thought of a nation, an epoch, and, in particular, of the individual artist.

We have already not only discussed the expression of thought by plastic means, but also have studied to some extent the peculiar brain-formation that tends to express itself in sculpture. We have seen that it is figuratively simultaneous and convergent in action (see page 98). We are thus at liberty to commence at once our examination of the nature of the technical means at such an artist's disposal, and subsequently to study a few examples of the co-ordination of these means and the resulting kinds of relations.

But as well as the main sculptural factors of mass, of plane, of surface, which must be studied with the attention that their importance merits, there are some others that we should not pass over in silence ; though a rapid review of them is all that is really necessary for different reasons which will now appear.

Such secondary factors are : *Colour*, *Chiaro-oscuro*, and a third, of different nature, *Gesture* or dramatically expressive pose, as distinguished from its purely plastic homologue.

Let us treat of these minor matters before attacking the more important group.

The reader may be surprised to see colour figuring as a means of sculptural expression. The phrase is, of course, not strictly correct. At the same time, not only has polychromy played a very considerable part in the appearance of statues at all epochs, but the actual colour of the material employed in the statue has a certain modifying effect on the nature of the form that the sculptor decides to use. To the European reader the word sculpture evokes, almost uniquely, masterpieces of the Greek or Italian Renaissance Schools ; at any rate memories of them will probably fill the most important places in his remembrance. It is seldom realized under what hopelessly artificial conditions we usually study Greek sculpture. We are acquainted with it only as the inhabitant of ill-lighted and repellent museum galleries, and as being devoid of colour other than the softly harmonious tints that age has bestowed upon the marble. It requires considerable power of mental visualising to imagine these same figures in their primitive, almost barbaric surroundings.

One way of looking at Greek civilisation is to consider it in the light of a continual struggle against barbarism, from which in earliest times it took its birth. We must not then be surprised to find, lingering on beside these newer elements of restraint and order, certain others that we are to-day inclined to count as almost savage. The uncoloured sadness of our Greek relics is improper to them. Let us try for a moment to reconstruct for ourselves, as a colour vision, the thing which was a Greek city.

First, probably on an eminence above the town, and so profiled against the sapphire sky, stood the temple, the home more than all others, of sculpture. Part of the marble, the greater part, was left intentionally white ; but a colour value was given to that white not only by the lavish gilding of the

bronze shields and garlands that almost always formed an important part of the decoration, but also by painted ornament itself. The now plain and simply curved capitals of the Doric columns were formerly gay with a palmate design and with a Greek key. Those portions of the architecture placed in full light were ornate with blue ; while the darker red tints were reserved for the shaded parts.¹ Yellow and dark red, or sometimes black and white tiles, and bright chromatic antefixes of baked clay crowned the whole in vivid contrast with the sky. The walls were covered with the more delicate hue of fresco from the brush of some Apelles or some Polygnotus, inspired by the life history of the particular god. Perhaps as focus, as in the Parthenon, stood the gold and ivory, the gems of a chryselephantine statue of the deity. The carved statues themselves were warm with flesh tint. The now vacant eyes were made living with painted detail, or even by incrustation of precious stones ; and, the marble, believed in some way to be the gods' abiding place, was perfumed and crowned with bay.

Still the tinting was very secondary so far as the real artistic expressiveness of the statue was concerned. It was rather a necessary addition in order to bring the figure into harmony with its polychrome surroundings ; and seeing, as we do, the statues to-day, mournful among scarcely coloured things, we have perhaps a juster impression of their intrinsic worth in their saddened state, than we should have, had they preserved among these sober tints their primitive brilliancy.

At the same time polychromy is certainly able to modify the established relations of a statue, by instituting, for example, marked differences such as that between dark painted hair and lighter flesh ; we are thus by no means entitled to

¹ This year, 1924, a life-size tinted replica of part of a corner of the Parthenon is being erected in the British Museum.

ignore it.¹ In this respect we must not forget the importance of the polychromy of the Della Robbia terra-cottas. Here the colour becomes so integral a part of the work, that it would almost be difficult to conceive of their untinted aspect. On the other hand we do not prize the formerly painted sculpture of the Middle Age for its colour; nor is the work's spirit seriously diminished now that the tints have faded. If we make certain reserves in the case of Eastern art, we may practically consider colour as an interesting, even as a useful, addition to the means of sculpture; though, at the same time, it does not form a really essential factor among them.

The question of light and shade may be dealt with in an even more summary fashion. There has been much modern talk about the light and shade of sculpture. These discussions are due to the rareness in recent times of the true sculpture spirit; though quite recently in France some attempts, abortive for the most part, signal at least the desire for its existence.² Those who talk about masterly arrangement of light and shade should remember that *chiaroscuro* is a modern thing, invented, for the most part, by Leonardo and the sixteenth-century Dutch painters. Since its introduction no great sculpture has been produced. We should also note in passing that even the painting which accompanied the finest efforts of the sculptor's art has always been void of shade, except what is strictly necessary for the representation of relief.³

¹ At the time of writing I have before me a small Indian statuette of Ganessa which deprived of its vermilion and gold would be but a shadow of itself. A somewhat imprecise form owes almost all its distinction to painted colour differences.

² Written in 1914. To-day the movement affirms itself more and more (1924).

³ Let me here forestall cavilling criticism, and ask anyone who would present to me a statuette by a contemporary and fellow countryman of Rembrandt, excellent though it might be in many ways,



IRIS (?) FROM THE PARTHENON. (Brit. Mus.)

Shows stable equilibrium of all great sculpture, and how movement is suggested rather than realistically rendered

The way of seeing changes insensibly across the ages, and here we find one of the greatest obstacles to the appreciation of an art of older times. Certainly an ancient Greek did not see the world in the same way as we do. His surroundings, his knowledge, different in kind from ours, caused certain modifications both in the actual impressions received by his retina, and in the unconscious choice he exercised among them. I am convinced that the Greek had a much more positive conception of the material and solid existence of the objects surrounding him than we have. We are subtly educated by a long course of scientific analysis and artistic impressionism.¹ We have seen that analysis is destructive, it destroys the concrete and simple duration of things. But a sculptor, however abstract be his mental conceptions, is bound to be in close touch with the tangible existence of objects; for material representation is his unique means of rendering the abstract. A sculptor thinks in masses, and in their limiting planes; he arranges them to express his idea adequately. When this arrangement is masterly it makes a harmony analogous to the infinite harmonies of nature. Consequently when the sunlight falls upon the statue, when nature is left free to act on an abstract of itself, the resulting effect is harmonious by balance; and from whichever side the statue be lighted, though the distributions of the lights and the shadows differ, the balance is always there. All the

whether he would have the serious pretension to uphold Holland as a great home of sculpture. An English painter of some renown praised to me one day the beauties of the light and shade of the Elgin Marbles. Certainly he was quite right, the arrangement of the chiaro-oscuro is superlatively beautiful; but he was according to a secondary result the importance of a primary conception. His modern painter's eye and brain were used only to dealing with what one might term the aspect, the camera obscura aspect, of things, and not with their tangible realities in space.

¹ But see p. 305.

same, arrangement of light and shade played no part in the sculptor's plastic conception of his work, it is a secondary result of his formal scheme. On the other hand if we examine the sculpture of an impressionistic period we find that the method of conception, if not entirely opposed in direction to this, is at least partly so. Rodin, truly an impressionist in clay, often allows considerations of shadow arrangement to enter into, even to play a preponderant rôle, in his art. His figures are frequently markedly superior from some particular point of view, and specially so when seen under some particular lighting.

Chiaro-oscuro may then be taken as a concomitant of sculpture, and not as an element of it.

Sculpture, at least the most important part of it, and that with which we shall be almost uniquely concerned, consists in a representation of the human figure; so both facial expression and dramatic gesture must be taken into account. However, so much has already been written on this subject, and its treatment is so obvious, appreciation or adverse criticism so within reach of all observers, that I shall pay but little attention to it. Evidently opinions may differ here as elsewhere. Winckelmann may write pages in praise of the pose and movement of the Apollo Belvedere; and another author, I forget who, compare the statue to a young man giving notice to his valet. Personally I must admit to a certain sympathy with the second view of this figure, which is conceived in deliberately expressed movement. There is something antagonistic between the nature of stone or bronze and the direct unmodified representation of movement; especially as sculpture is often, if not always, destined to take a place in an architectural whole. A reluctance to express movement openly is well exemplified in the famous pediment figures of the Parthenon. If they do not represent complete repose, they give the impression of pos-



ACANTHUS AND DANCING GIRL COLUMN FROM
CARYTIS. Fifth century. (Original at Delphi ; cast in Louvre)
*Shows again Greek discretion in use of movement. The figures are
beautiful examples of Greek plastic work*



sible, rather than actual, movement ; thereby attaining, by indirect suggestion, a more complete expression of the sense of life, than they would do, did they employ the more clumsy method of representing violent unbalanced motion. I do not even make exception of the Iris (?), for here again the motion is far more suggested than represented, the figure is internally stable. On the other hand, when directly expressed movement enters into the composition of large work, I think one's sense of measured perfection is inevitably shocked. Even the triumphant Victory of the Louvre, sweeping irresistibly forward through the air, leaves one not fully satisfied. Does not one turn, with added pleasure, to the cast of a column from Delphi at the side of the staircase ? How inimitable is the rare restraint of the three figures of dancing girls, figures which express the rhythm and soul of ordered movement, rather than the movement of the dance itself. In full but undetached relief, they form a part of the column, and thus of the general architectural scheme, the stability of which it was of the first importance not to sacrifice by an incautious insistence on the movement of the figures. It is only the florid use of foliage that I would condemn. In small work alone, charming rather than great, such as the Tanagra figure of dancing girls, or the spirited little Assyrian bas-reliefs of horses (Louvre), or again in the curious contortions and special aesthetic of the reliefs of the Amarāvāti Tope (Brit. Mus.) may real movement be allowed. Indeed, on second thoughts, the contortions of the last cited examples are in reality stable. The accompanying reproduction of a detail of a relief in steatite due to the Bihar School of about the twelfth century illustrates this point unusually well. The relief represents Śhiva with Durga, and musicians, attendants and worshippers. In spite of the contorted poses the figures are seen to be established in a stable way. Large oriental sculpture almost invariably deals with figures in

repose, and generally seated. Much of the failure of modern sculpture to excite our full admiration is due to a non-observance of this law. Large groups of prancing horses, life-size tiptoe-poised runners frozen into perpetual stillness are fundamentally unsatisfactory, in spite of praiseworthy excellence of composition or of modelling.

Sculpture should be abstract and passionless. The price paid for a derogation from this law is a loss of that power of lordly domination, which its actual material presence gives it over the mere figments of a painter's brush. Emotional sculpture descends too much to our own level; tends too much towards simple portraiture; becomes too much an ungeneralised representation of some particular moment; aims too much at imitation rather than at a *savant* use of natural forms to express abstract ideas. The representation of the particular in sculpture is never a complete success. The actual existence of the solid form makes all attempts at categoric reproduction of individual details come dangerously near the wax-work ideal. In art we must read the story of Apelles' grapes with a Greek understanding, and not see in it praise of such *trompe l'œil*, such deceiving of the eye, as much modern painting has shown us to be possible. Then again what deceives the inexperienced eye unaccustomed to register, for example, delicate colour gradations and harmonies in a shadow, would not have the same effect on the trained and delicate perception of a refined artist. In a similar way almost all realistic sculptors overlook the wider harmonies of mass and plane in their haste to render each wrinkle, each "accident," of the flesh. An intense preoccupation about detail, accompanied by a loss of power in commanding and ordering it, are the signs of impending, if not of actual decadence.

The education of an artist is almost entirely a course of study of the relative importance of the facts of visible nature.



DETAIL OF SHIVA WITH DURGA—surrounded by musicians, attendants,
and worshippers. Bihar school. Circa twelfth cent. In steatite
Shows way in which figures are stable in spite of contorted poses

The greatest artists have always been those who never erred in their rendering of the primal fundamental facts of visible nature, translated into the form required by the artist's particular art ; afterwards they added more or less detail, or perhaps I should say, more or less detailed detail, according to the demands of their own personalities or of the epoch. Eugène Carrière once said to his class : " I do not wish you to paint like me. I am here to point out on the model certain facts of construction. These facts you must represent in your work, though how you do it is a matter for personal choice and discovery."

To return to the question of gesture and facial expression, which we have for the moment quitted. An artist should always remain within the limits of his material ; that is, he should never try to make us forget its nature ; on the contrary he should rejoice in the quality of the marble or the bronze. The mass, the weight, the rock-quality of marble is not in accord with direct representation of rapid movement. Again I plead for generous understanding. Go and study attentively the marvellous tracery of the frieze of the Panathenaic Procession, the wonderful sense of stability of each yard of it, in spite of the numberless prancing horses, each guided by an almost immobile ephebe. The masses are so cunningly distributed that we are made to feel the existence of the idea of motion, rather than to feel that we have motion represented before our eyes. The point is subtle ; a thing sprung from the perfect measure of Greece, from the innate hatred of insistence, of exaggeration.

The apposite use of material is always a concomitant of great art. In sculpture both the choice of subject and of technique must be co-ordinated with that of the material. Bronze is more fitted than any kind of stone to the rendering of imitative work ; it admits of more impressionistic, and, in a sense, sketchy treatment ; by which I mean sketchy

conceptions of the forms ; and, of course, not merely unfinished work, which in marble is less unsatisfactory than in metal. The exact reasons, if indeed one could run them to earth, of such statements would take us too long to consider here. I can only state generally that there must be close co-operation between the composition, the size, the kind of modelling, the artistic intention of the work and the material employed. For example, as regards bronze, its darker colour, the sense we have of its lesser fragility, render it more adapted than marble to poses, such as that of the Apoxyomenos of the Vatican.¹ Fantasy, generally falling into this group, is also better rendered in the metallic medium ; the *putto* of Verocchio in the courtyard of the Palazzo Vecchio is a case in point of just choice.

Tours de force in marble like the Apollo and Daphne of Bernini (Villa Borghese), in which each laurel leaf is frail and separate, are artifice and not art. The quality of the material is not loved and used. One thinks, in spite of oneself, of an elephant that has been taught tight-rope dancing ; the obviously wonderful is a mistake in taste. Such errors are never or rarely committed in countries endowed with a genuine and pure plastic tradition. For instance the Chinese make no such errors. They reserve work which is far more wonderful than that of Bernini's stone-cutter for small objects, and for more precious materials that do not possess the statuesque, the monumental qualities of marble. The patient and microscopic perfection of some Greek intaglios is satisfying to the full ; one feels the appropriateness of the work to the gem.

A similar error is made by artists who endeavour to fix in bronze or in marble an idea belonging to the romantic or to

¹ Of course now in marble ; but all that class of statue was unquestionably first presented in bronze. We have now only antique copies in marble of long lost originals in bronze.

the *genre* groups. Vagueness of sentiments or of sentimentality does not find in these media the envelopment and mystery inseparable from its expression. Rodin has made many attempts to prove superior to this law; they only prove its infrangibility, and works like *L'âge d'airain* or *L'homme au nez cassé* remain his masterpieces on account—amongst other things—of the accord between thought and material. That there is infinite strength in reticence Rodin has too often forgotten. He has turbulently attempted to force his medium beyond its natural limits. One cannot help thinking that much of his message might have been better expressed in paint or in the light and shade of etching. I need not speak here of the superficial trickery of veiled faces of women, and similar fancies that modern Italian sculptors often delight in; practically they are by no means difficult of execution. But before leaving the subject I should perhaps call attention to the difference between the intentional envelopments and slidings-off of Rodin which constitute an integral part of the idea, and the perfectible conceptions of Michael Angelo, which he left in an unfinished state of execution. The titanic forms, still half imprisoned within the roughness of the rock, await perfection, and while it waits, the beauty of the unfinished thought vies with the rough hewn beauty of the stone.

XV

SCULPTURE. TECHNIQUE

So far we have only considered sides of the sculptor's art that are of minor importance ; many of the issues have been negative. We must now examine the essentials of the subject ; we must study the different possibilities of the expressive arrangements of mass and of plane ; we must enquire into the expressive value of surface.

These factors constitute the major part of the language at the artist's disposal. Unfortunately it seems to be to-day a language but little understood ; and many exquisitely alive to the subtle variations, to the meanings of music, are inapprehensive of the equally eloquent, equally subtle melodies of form. This is possibly due, at least in part, to the fact that a statue visibly represents a human being, while music, except in a few negligible cases, is obviously an abstract art.

The province of sculpture is then thought to be limited to a kind of reproduction, at best to be "ornamental." Or perhaps we may say that it is quite unusual to think about the matter at all. A statue is supposed to be a thing designed to add an interest to a public place, to furnish a corner of an apartment, to give a general rich effect to a monumental staircase. So it is, but it may be also much more. It is a work of art capable itself of the very highest forms of thought expression, saved from the often sensuous and almost



ILYSSOS. PARTHENON. (Brit. Mus.)

Shows simple arrangement of masses and planes. One single plane runs across upper thigh and stomach. Another lies across the pectorals and shoulders. The inside of the lower and the top of the upper thigh catch the light equally. Notice horizontal straight line from under the upper knee, lower line of ribs above navel, base of lower breast

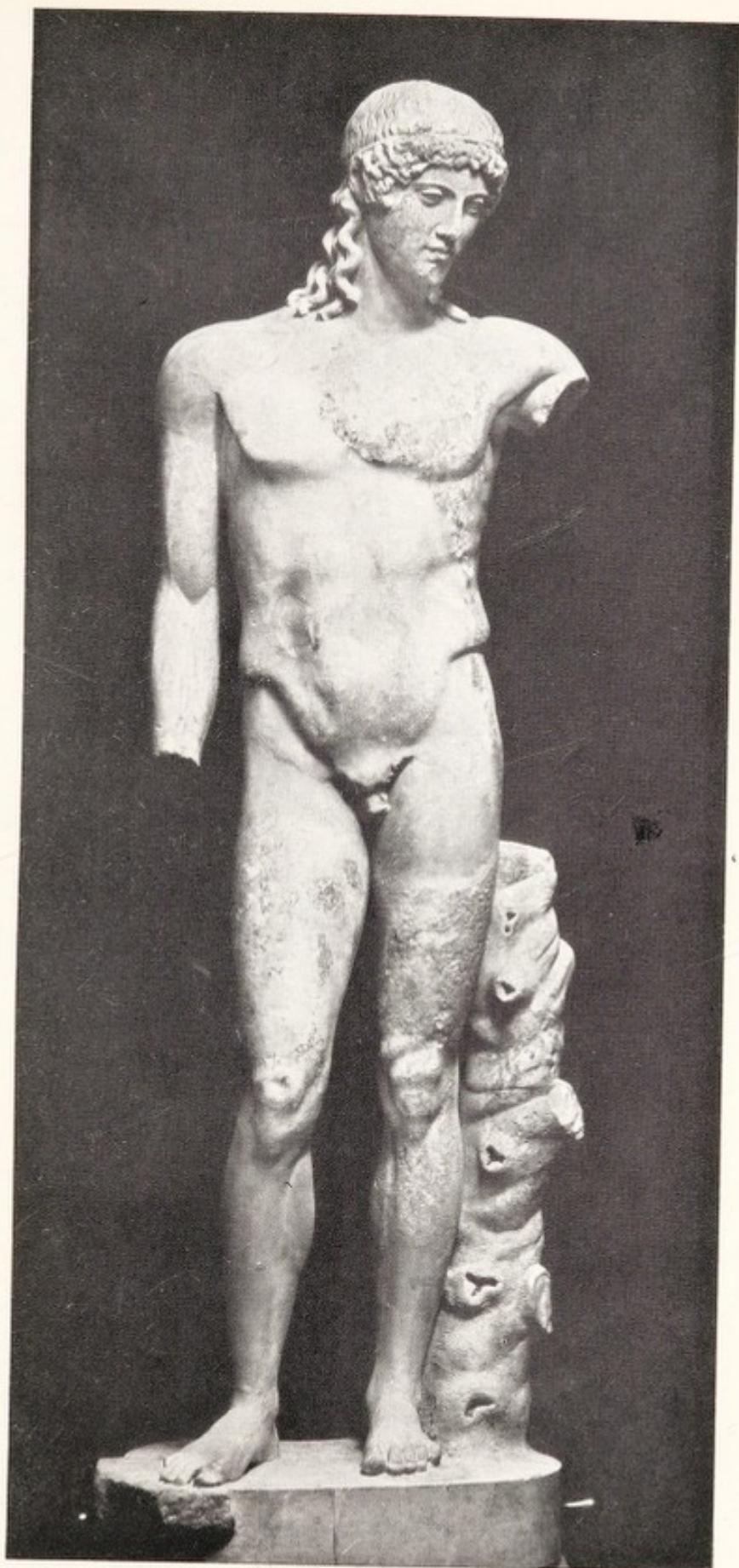
physiological colour appeal of painting, second perhaps only to architecture in her very highest and rarely attained regions, where the means of expression are reduced to their simplest state of relative proportion, and abstract, wholly created form. Sculpture may be so treated as to become an art purer, more abstract even than music is, in spite of the necessary co-existence in it of the concrete element of imitation. For neither is music free from the sensuous luxury of rich sound, though it may be indeed acquitted of the charge of even moderated imitation of natural things. I think there is little doubt that the double end of the plastic arts, that of both representation and expression, is the probable cause of the lack of attention bestowed by most people on the second aim. The achievement of adequate representation is deemed to be sufficient ; so the very existence of possible abstract intention is overlooked.

The major part of sculptural expression lies in the arrangement of the great masses. We have already examined in the chapter on beauty the probable importance of the part which balance or equilibrium may play in its existence. Let us now study, more in detail, the forms that this equilibrium may take in sculpture. Let us examine the " Ilyssos " from the Parthenon pediment with a view to finding out how much of Pheidias' idea may be found in the simple statement of the main contrasted masses. We see immediately that the mass of the thorax, with the plane of the pectorals slightly directed upwards, is clearly contrasted with the retiring plane below, established by the receding planes of the stomach. These latter find a repetition, or rather a continuation, in the lower plane of the upper thigh, thus carrying a feeling of horizontality, with a consequent sense of stability, right across the figure. The plane of the lower thigh and the upper plane of the upper thigh generate the feeling of a plane, in part imaginary, which extends over both thighs and over a large

part of the abdomen. The placing of this plane is in exquisite harmony with that of the pectoral one ; the difference of direction being but slight. It is in the slightness of the difference of the plane directions that is written the calm, dominating certainty of Greek art. The directions change with a delicate undulating motion as reposeful, as Olympian in itself, as the idle breathing of the Grecian sea.

Were I to choose a standing figure the demonstration would be much the same. Only the insistent horizontality, which just before gave the stable sense, would now be replaced by a marking of verticality. The body would be in equilibrium on a single leg. One would feel instinctively that the centre of gravity is adequately supported by an effortless bone thrust. The muscles are only just so much in tension as is required for maintaining the upright position. All expresses the placid equilibrium of sane balanced life. Throughout Greek art the aim was always to preserve, as much as possible, the clear absolute nature of the straight line, of the simple plane. The variations are just those necessary for the poetising, the naturalising, the rendering rhythmic of what would otherwise be a mere mathematical scheme. See how wonderfully straight vertical folds of drapery are placed to balance and uphold masses above them, and to contradict and modify excessive curvature elsewhere, even in such commercial work as the Tanagra figures.

If such a system was suited to the expression of the Greek spirit before Socrates (and after Socrates Greece had done her work and was foredoomed to decline), it was not at all fitted to that new life of enquiry, of doubt, of mysticism, of the beginnings of modern science that marked the Renaissance. Let us consider for a moment a figure by the artist, who, if he stand in many ways apart, still forms the culminating point of that period in Italy. A breath of martyrism had swept across the world since the fair days of Greece. Self-



APOLLO. FOUND IN THE TIBER
(Museo Nazionale, Rome)

*Shows very delicate variation among themselves of great planes
of a Greek figure*

mortification had been preached. The athletic, godlike joy of life was no longer the ideal. How then shall the sculptor's language change to fit itself to the new mode of thought? A moment's glance at a figure by Michael Angelo shows that we are in presence of a new aesthetic, in spite of the vaunted borrowings from antiquity. Suffering has been raised to the seat of joy. We find no more the gentle passages from plane to plane, that sang the music of an earlier time, that sang the fair fancy, light as the sea foam of Aphrodite's birth-place. We find, instead, plane set violently against plane, each still broad in its conception, as the elements of all great sculpture needs must be, but broad almost with regret, one might say, so much is the surface varied with tense muscle forms. From head to foot the figure is the *essence* itself of opposition, and so expresses the unquiet seeking of the times. A recumbent figure to compare with the Ilyssos: the "Day" from the tomb of Giuliano de' Medici at Florence. The head is turned violently towards the spectator, one arm strained forward opposes itself strenuously to the other folded behind the back, the legs are crossed in an unnatural, improbable way. The figure is reclining without repose. The left leg, advancing towards us, is opposed to the right shoulder, which is dragged away from the spectator, only because it lies intermediate between the left arm and the left leg.

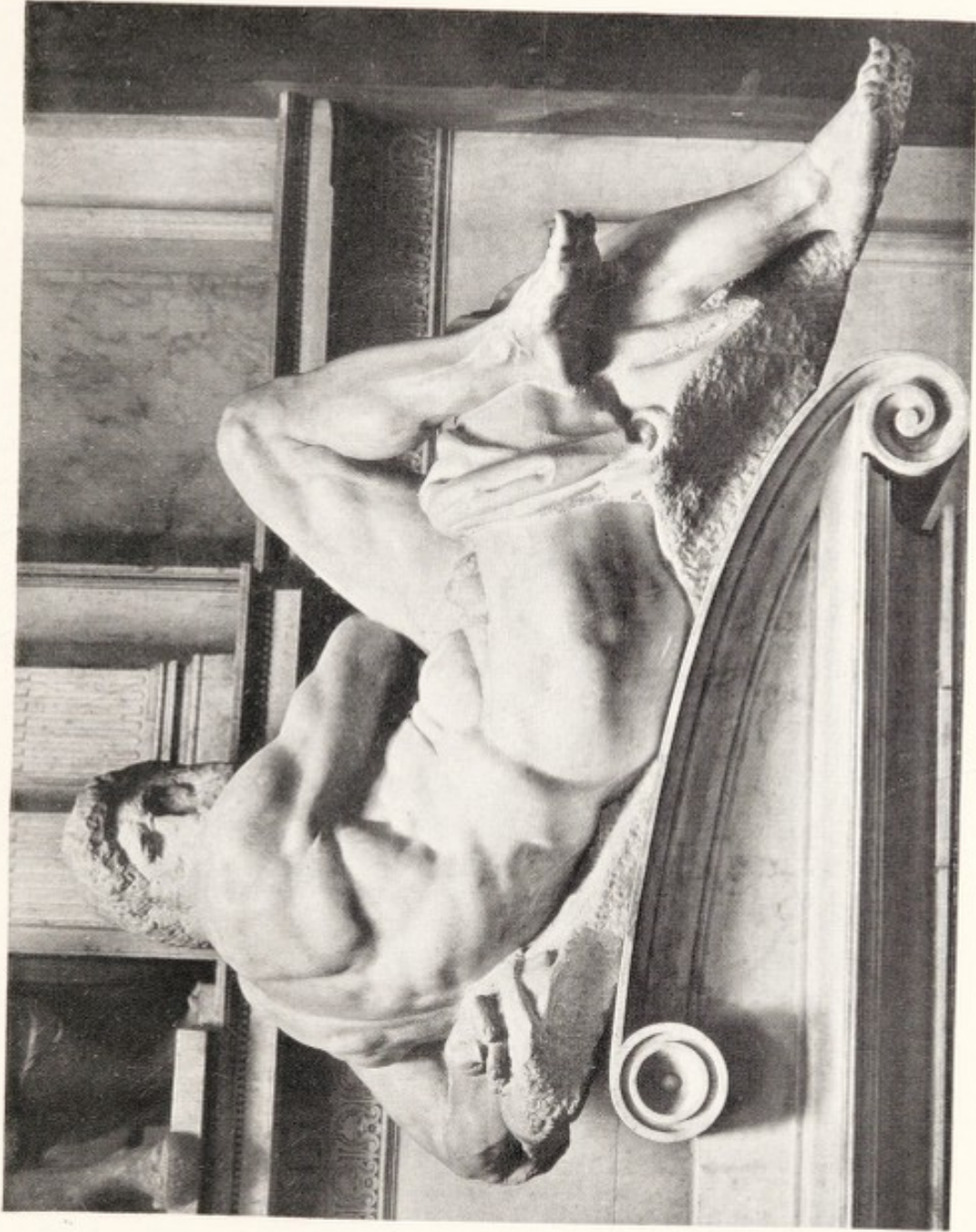
In its simplest expression the art of Michael Angelo may be reduced to the continued repetition of the contradiction of two directions: that of the thorax and that of the pelvis. The complete contradiction is of course modified by the directions of the minor masses; otherwise the composition would not be retained within its natural limits, and, instead of a concentration of idea, one would have two opposed forces forever striving outwards. This would produce disunion and destruction of the homogeneous thought.

Another example of the equilibrium of violent opposition practised by Michael-Angelo may be found in the wax model of the thighs and torso of a woman at South Kensington. Just enough neck indication is given to allow us, without any difficulty, to complete and continue the statuette mentally. In this case the head and left foot (both non-existent but sufficiently indicated) violently counterbalance, by an excessive movement of small masses to the statue's right, a general mass tendency towards the left.

The same harmonies and primal laws govern the universe. The constant relations of factors that a physicist expresses abstractedly in an equation, a sculptor uses concretely in his statue ; otherwise it would shock our instinctive, unreasoning sense of the truth and method of the universe. A sculptor by giving great movement to a small mass, such as the head, arrives at balancing a smaller movement of the great torsal volume, and the sense of equilibrium is satisfied.¹

In Michael Angelo's "Day" grace is reduced to a minimum, striving unquiet force is expressed by an equal and general tension of the muscles. But art has not yet become fully unbridled and romantic ; it still holds with tradition ; the

¹ This is after all nothing but a different way of expressing what the mathematician throws into the form of algebraic functions concerning the products of force and mass, the factors of which vary reciprocally, when the product remains constant. The difference between the mathematical formula and the work of art is : that the one treats of one isolated fact of the universe, reduced to a simple statement ; the other deals with the agglomerated whole by means of the intuition of the artist instead of by the logic of the mathematician. Art and science are not so widely separated in aim as those who only study profoundly one side of the question would have us believe. Art supplied the want of science in Greek times, art was resplendent. In our day the want of art is only felt by the few, science supplies the want of the greater number. But the two subjects are strangely allied in their ultimate heights, though modern analytic methods take a road different from that which runs through regions productive of great sculpture.



'DAY.' MICHELANGELO. (Florence)

Shows difference between Greek (Plate facing p. 174) and renaissance aesthetic. Here directions of masses are violently contrasted. But note at the same time the simplicity of planes, one lying over forearm upper arm, shoulders, sloping side of head; the shins form one plane. The bent legs, drapery, &c., compose another

plastic formula is changed, but there is still an observance of rhythmic beauty for its own sake. All is not sacrificed to emotional expression, which might be expressed as well, if not better, in word description. Plastic thought, inexpressible otherwise than in visible form, is still strongly in existence. From a profile point of view the scheme is simple and obvious. It lies in the juxtaposition of the curved line of the back and the straight line formed by the two legs. In the accompanying "Night" the matter is slightly less simple. To form a harmony with the same straight lines of the legs we have the very slightly curved direction of the torso ; but hide a moment the head and shoulders of the figure, it is at once evident how much they count in the whole. The arched line from shoulder to brow is a completion, a climax of the rhythm ; while the head of the "Day," on the other hand, is negligible.

But we must take great care not to make an abuse of the dangerous study of line as line in sculpture. Inefficient modellers work by profile ; they turn repeatedly both the living model and the clay, till, by a continual correction of profile outline, they arrive at a sufficient result. Such men are not sculptors at all. The mind of a true sculptor works continually in three dimensions ; that is : in height, breadth, and also in the direction from or towards the spectator. We have been able to speak of a scheme of line in Michael Angelo's figures ; but it was not in line that he conceived them. The line that we see is the secondary outcome of his primary mass conception.

The profile is, for the practical sculptor, an excellent means of controlling the correctness of his finish ; but he should be fearful of paying attention to it earlier. Nor should he fall into another pitfall, and consider all his work as a kind of crystal-like arrangement of superficial planes. To the question of minor planes of surface, I shall return later. One

cannot too often repeat that the essential of *sculpture* is the *arrangement of solid masses*. These solid masses are bounded by a series of great planes. The human body is not a round thing, the pectoral muscles form one large plane extending right across to the shoulders, the upper part of the back has also a general tendency to flatness; the back of the wrist and the first part of the forearm may be adduced as examples of what may be found, by study, to be true of the whole body. The first arrangement of masses will then forcibly result in an arrangement of the planes which enclose them. We see the resulting sculpture by the light reflected in greater or less quantity from these different planes. Hence it is evident that the simpler the arrangement of planes, the broader will be the effect of light and shade. Dignity of concept goes hand in hand with breadth; with breadth but not with emptiness. Subservience of detail is not suppression of it.¹

A point not often appreciated in the construction or study of sculpture is that of the generation, by different limbs, of large imaginary planes so to say enclosing the figure or arranged around it. These are particularly important on account of the simplicity they cause. This simplicity is not only material, from it results a secondary simplicity of effect in light and shade. An example or two may serve to illustrate my meaning more clearly. In the figure of the "Day" the side of the hair, the whole of one shoulder-blade, part of the top of the other, the upward turned side of the upper left arm, the general form of the left forearm, all lie on a single plane; and so catch the light evenly. The complexity of the pose is, so to speak, brought back to simplicity, it is subject to and controlled by the imperiousness of enclosing planes. The inner side of the left thigh and leg form another, continued, with profound address, by the falling folds of drapery. The apparent line of the shins is only the perspec-

¹ The case of arts such as Egyptian requires special examination.

tive view of a plane which they form in space. The shapes of the muscles of the right upper arm and shoulder blade fall into order with the energetic *latissimus dorsi*. But it is unnecessary to continue an enumeration. Note, too, in the figure of "Night" how the light falls equally on the forearm, and on the side of the leg and thigh. The contrasted plane is, of course, that of the top of the shoulders, the chest, and the stomach, brought by the pose into unity. The reader may seek for himself the system of planes on any great statue; their non-existence is a proof of mediocrity.

What is true of the greater is, in sculptural matters, true of the less. Form is fundamentally based on a system of planes. Apply to an antique statue the sculptor's usual trick for examining his surface: light the figure at night by means of a single lamp or candle, from above, from below or from the side. The seemingly rounded form analysed by violent light and shade will be seen to split itself into innumerable facets. Each is inclined to the surrounding ones with the same suave delicacy that marks the gentle passage from plane to plane, down the whole figure, from pectoral to abdomen, onward to the thighs, and farther on again, to that imaginary one lying across the shins. The same sentiment that governed the arrangement of the whole, governs the arrangement of the detail. To express the artist's mind, one natural movement of the body was chosen from the infinity of movements that nature presents us with. In an analogous way a special and adequate system of minor planes was chosen from the inexhaustible refinements of smaller plane juxtaposed to still smaller plane of the living body itself. So the smallest fragment of a Greek statue is filled with beauty; its long buried surface is eloquent of the essence of the thought of Greece. The vulgar eye of an inefficient sculptor fails to see and take in these exquisite delicacies. His empty brain finds no need for a refined language to

express its void. A pose conceived imitated superficially and without understanding, from the masters of the school he affects, a sufficient "anatomy," and he is content. He rounds up his clay with a modelling tool, his marble with a file, in order to get the effect of meretricious finish ; and all is done. Unless indeed he choose, as a modern veil to his incompetence, a noisy imitation of the external appearance of Rodin's later work, where romanticism and chaotic roughness reign. But could he have imitated with success the marvellous study and profound knowledge displayed in the St. Jean ? That knowledge was still in Rodin's mind ; it still governed the seeming recklessness of the hand of the most remarkable imitator of flesh and bone that art has seen, while he executed the impulsive modelling of his latter days. Form is a language of the mind, and empty minds express themselves emptily.

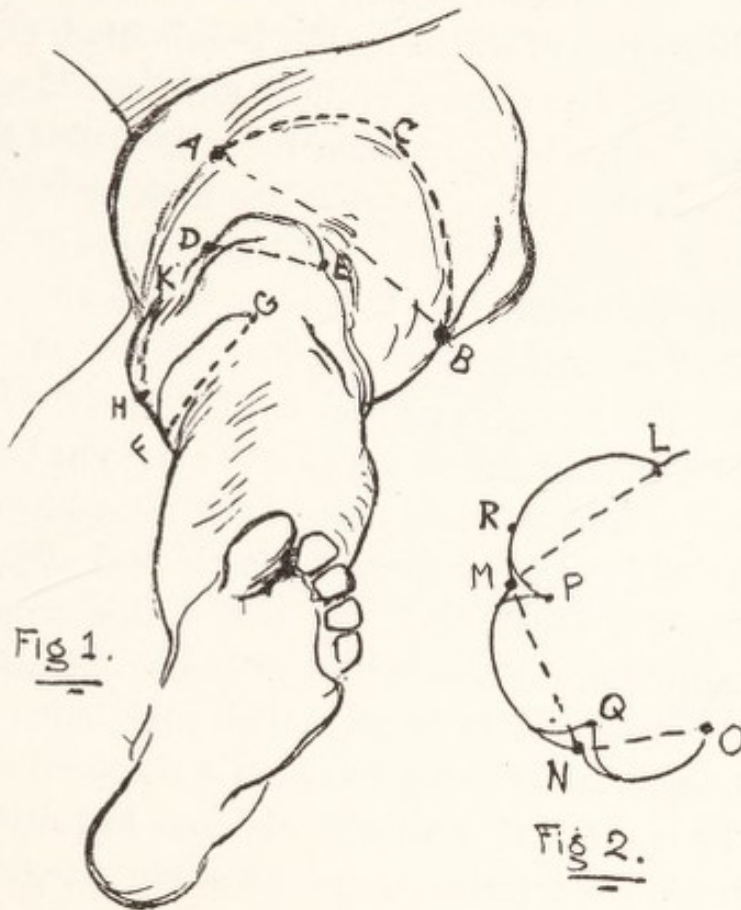
Before the figure of the "Day," chance willed it that I should learn to apply to my art another essential principle of the manifold building up of the human form. I learnt that the lower parts of the depressions on either side of a convex form must be very carefully studied ; that their lowest points must be rhythmically linked one to the other in intention ; and that in working, one must keep ever before the mind a kind of subjacent and imaginary series of planes, which indeed have no real anatomic justification, but only a rhythmic or an artistic one. The accompanying diagram will perhaps explain my meaning. Let us suppose a cross section of the thigh for example. The dotted lines represent the planes lying between the hollows ; of such planes the rhythmic arrangement must harmonise with the conception of the whole. A proper attention to this ensures a feeling of solidity of construction, of probability, which is endangered by the too deep cutting of such hollows, or rather by their irregular depth. It was, I believe, the modelling of



FIGURE FROM WILLIAM BLAKE'S *DIVINA COMMEDIA*

Shows sculptural definition of the forms, and their complete establishment. The conception is in three dimensions. The shapes of all the interior modelling are fully drawn out. The plastic 'intention' of the form itself should be noticed

the digitations of the serratus magnus of Michael Angelo's figure that first called my attention to this fact. This Rodin never realized. Thinking to gain in strength, he frequently exaggerated the depth of the hollows, thereby destroying the mass solidity of the form. He did not know that the primal element of power at the sculptor's disposal is an architectural



one, based on rhythmic interweaving of perfectly complete and harmonious surfaces, that limit masses in balanced relation. He thought to gain strength, in violence of light and shade. This was a painter's idea and not a sculptor's.

Another point always observed in great sculpture is the careful and complete "drawing" of all the minor shapes.¹ Most modern sculptors are not really sculptors at all. They are modellers in clay; they leave all marble or stone cutting to

¹ This is well shown in William Blake's drawings.

professional "pointers."¹ This encourages a loose technique, possible in clay, by which undecided forms slide one into another, in the same way as the brush mark of a painter slips off into envelopment.² But what is justifiable in the painter's art, which deals only with the appearance of objects under certain conditions of light, is not so in the more absolute art of the sculptor, which not only deals in real and tangible reproduction of the form, but is animated, or should be, by a rigorous, less romantic, more clear-cut ideal. We should be able to trace round each form, modelled in relief on the surface of the figure, a pencil line limiting it exactly ; and this pencil line should give a design beautiful in itself. Do not let me be understood to advocate a surface cut up into a series of geometric shapes placed uncompromisingly side by side. The forms must pass by delicate envelopment one into another. But the envelopment must not be casual, and the result of unconsidered chance ; it must be governed and foreseen, instinct with meaning, as indeed every factor of the expression must be. The pencil line would pass through the middle, the lowest part of the envelopment, and there must be no doubt as to where this middle is.

If I be thought to be fixing too high a standard of execution, or to be constructing an artificial and fortuitous series of rules, I implore my reader to go and study attentively the statues themselves, to see whether or no he find my words justified. Few people realize what a high and intensely difficult art sculpture may be ; and it is just the observance of these refinements that produces great work. As a crowning perfection of the untiring attention to each element of the surface comes the rhythmic expressive movement of it, into which are merged and lost the planes and fair minor

¹ Since this was written, "direct cutting" by the artist has been coming more and more into vogue. See Frontispiece.

² See page 252.

curves that, like to separate notes, submit to a larger order, to the music of the whole, to a music vital with varying measure, to a movement that runs here swiftly over a tense muscle shape, there indolently lags in gentler mood. It is a rhythm as fraught with meaning to a heeding eye as is a symphony to a musician's ear. A line or surface can be light with a lyric grace of thought, or sad with the suffering of a world, or it may be curious and filled with questioning doubt. Whatever the statue's pose implies of joyful simplicity of sunbright gladness must find echo in the moulding of each limb. The wonderful modelling of Rodin is painfully void of lyric or of far-reaching thought. Rodin is visible nature's faithful slave, his modelled flesh is living, palpitating, almost as the model's own, but it makes no call upon our understanding, discloses no abstract beauty of the mind. Study upon wonderful study of the movements of the human frame, the polished pride of woman's form, serpentine, lascivious, or nervous, strained, taut as a bent bow; the strength of male youth; the sad decline of age; flesh gleaming and seductive, or flaccid and deformed by time; all live again in clay by the deft science of his hand.

XVI

SCULPTURE—*continued*

EVERY artist worthy of the name is a worshipper at the splendid shrine of nature. His life is a devotion to the endless study of her secrets, to an understanding of her beauty's myriad elements. What, then is the difference between the brain of Pheidias and that of Rodin? Each sees and reproduces the wonderful series of delicate forms, and subtle planes; each weaves life with his imagination's warp and weft; each draws from the mighty reservoir of natural things the primitive matter of his art. But there analogy ceases. The ordered, measured mind of the ancient Greek sifts surely the general from the particular; each plane conceived by it, and executed by the obedient hand, is clear-cut and precise as Greek thought itself; the "accident" of the individual model is thrust aside; the form becomes living and godlike; for it is above emotion. A truly great artist only uses indirectly, and in part, the unreasoned emotion that for a moment may, or rather must, subjugate him before the model. His reason stays and guides his hand. To him nature is a means of thought expression. To Rodin she is all, or almost all. The thrill of palpitating flesh is the basis of his art; his form reproduces the unordered multiplicity of nature.

Of a truth nature, the universe, is ordered, but it is an order infinitely great, an order that scorns a frame. Art must be framed so as to fall within our little comprehension.

The artist composes a new and limited order in his work, similar in a way to, though far removed from, the great infinite order of the whole, of which it itself forms a negligible part. Rodin's technique is full of suggestions of multiple form; it is full of violences unbalanced, ungoverned by a regal mind; it is moments of nature cut out from their contingent facts; but it holds no suggestion of the homogeneous whole. His mind is swayed hither and thither. Now a group like *Sœur et Frère* recalls one knows not what of more gracious Latin things; but the soft naturalness of the enveloped surface, the deep shadow-full hollows, the spontaneous pose of the younger child are at variance with the domination of Rome, and rob the figures of their dignity. Again the equilibrium of a torso mass will evoke Hellenic things; though the fugitive unrestful passages between the detail planes mark it with more modern date. The likeness is transient, unfounded on the swift, ingenious spirit of the Greeks. The work remains suspended between two ideals. Then again the beauty of the sculpture of the Middle Age will hold his artist's eye and sensibility. Its evident seeming is reproduced; but the true sculptor's sense of simple, restrained clear form carved in stone, escapes him. Rodin strove to commit to clay a record of his own emotional sensations caused by the inexhaustible movements of the model; at best they express some single passion or emotion. This art has neither past nor future, it is truly impressionist, subjective, and limited in outlook. This emptiness of thought and of intention he remedies by romantic baggage drawn from the theatre of Dante's Hell (though here again the Florentine's rigid parsimony of expression escapes him) from the turbid energy, the romantic unsculptural light and shade of Victor Hugo, where confusion supplants choice. Rodin brings us nothing but his unequalled imitative power. The world is none the richer for his thought; the record of a

model's pose, an unmeaning memory of Greece, an emotion from some romantic writer, all is reflection of other things. His mind is concentrated on the individual ; it is incapable of an extended, general view.

But this imitative tendency must not be thought to necessitate detailed work, for sometimes Rodin presents us with as highly simplified a surface as that of an Egyptian or an archaic Greek statue. It is in this that he affords us an example of the need of distinguishing between the different causes of simplicity in art. Simplicity is often vaguely preached as a quality necessarily good. This is not so. The simple acrobatic line of some illustrators is contemptible. The genius of Turner lay in multitudinous representation ; the sculpture of inferior sculptors is often of exemplary simplicity in its unintentioned roundness. At the same time it is of course true that the detailed representation of Turner or of Rodin must be submitted to certain general grouping of movements of form or of light or colour. It is doubtless a vague perception of such necessities that announces itself in the extolling of what is carelessly lumped under the indefinite aegis of the word *breadth*. Breadth may be full of intention and itself a part of the artist's expressive means ; or it may be empty, a chilly calculation, an uninspired formula. There is little doubt that the method of expression natural to Rodin is a complex one. However, some of his more simple surfaces must not be condemned off-hand as mere insincere imitations of, say, Egyptian work. An artist possessing the fundamental knowledge of the human form that he possesses is *ipso facto* incapable of producing totally invalid work, unless of course it be during moments of cerebral inactivity, to which we are all more or less subject. His instinctive sense of the relative values of essentials compels him to choose them in a proper order, to express, by subtle variety of relation and rhythm, here the form of sub-

cutaneous bone, there the looser outline of flesh. Where he may be more justly criticised is in his co-ordination of simplification of pose and of surface technique. It is here that we see the master of many means often hesitating and in error in his way of utilising them. Thence springs a lack of unity of intention, of conviction in the work. It seems to be, as indeed the whole of Rodin's work almost is, a series of masterly experiments rather than an integral work of art inspired by unhesitating conviction. Compare for an instant the life work of Rodin with that of his contemporary Puvis de Chavannes, who was by far his inferior in technical skill—I mean in handling of material ; or in minute knowledge of form, and in facility of translation of such knowledge into the medium ; I do not mean, of course, in such branches of technique as composition ; where Puvis was greatly the superior of Rodin—the unity, the unhesitatingly directed intention of Chavannes is at once pre-eminent. Take, for example, Rodin's *St. Jean*. A pose, almost hierarchic in its unnatural simplicity, is combined with a study of bone, of muscle, of skin worthy of a place among the highest efforts of imitative art. But one feels a dissonance between the diverse elements : execution and composition of the work. It is true that Rodin is too clever an artist to leave such a dissonance unmodified. The modifications he makes lie in the slight twist of the upper part of the thorax towards the left hand of the figure, the irregular arrangements of toes and fingers, and a thousand other derogations from the absolute equilibrium of Egypt, which shade off by imperceptible degrees into the actual surface technique that necessitates them by its quality. The statue remains unconvincing on account of the attempted, and necessarily unsuccessful, fusion of the abstract objective element indicated in the nature of the pose, and the subjective, emotional, directly dramatic one expressed in the detail and surface execution.

In turning the leaves of an album of photographs of Rodin's work, or in visiting a collection of the originals, we are surprised, seduced in spite of ourselves, by the amazing vitality of the multitudinous transcription of the living form. For the moment we forget that mere reproduction is neither the unique nor the highest aim of art, that the quality of "life" in work should be one of the elements of artistic expression, and not its end. The subordinating of nevertheless intense life may be studied in all truly great work. We have spoken of Egypt. Those of us who have not experienced that rare delight of gazing on the fine and changeful mockery of the Sphinx of Gizeh¹—Abu Hol, or the father of terror, as the Arabs call it to-day—may well examine the extraordinary head of Amen-hetep III. in the British Museum, especially the delicate line of the mouth at once so full of life, and yet ordered by a pre-determined and eloquent plastic rhythm. What has been already said concerning the architectural form in Egyptian work applies of course equally well to the form in sculpture. The formula of simplification is practically, geometrically, as straight in tendency as the Greek one, yet the relations are so arranged as to give the impression of a roundness, an envelopment, leading to a metaphysical suggestiveness of a psychological kind—which must be carefully distinguished from the delicate precision of the actual form—that at once separates the work from that of early Greece. The religious and hieratic motives of Egyptian work kept it curiously artificial, and within certain narrow limits of archaic convention throughout unbelievable centuries. This restraint was at the same time an advantage and a detriment. The advantage lay in the fact that each individual artist having his path clearly marked out for him was able to attain a higher level than is possible under the actual régime of divided personal effort.

¹ Photographs are powerless to give the sense of the original.



BAS-RELIEF OF ARSINOË AND PTOLEMY II. (Brit. Mus.)

Shows remarkable understanding of planes in suggestion of relief, which is, in reality, very low. It is interesting also to note to what degree perfect decorative balance may neutralize inexactitudes of drawing. Rhythmic equilibrium is more important than exact reproduction

The disadvantage was a very questionable one: the arresting of progress. I say a questionable one, for when art is free to progress it rapidly attains the apogee of human possibility, in a Pheidias or a Michael Angelo, and yet more swiftly declines, leaving as a heritage, a varied, but somewhat incoherent, expression of the national mind; whereas the controlled, co-ordinated effort of centuries of Egyptian work provides us with such an abstractly powerful transcription of human thought in its essence, as would be impossible of expression to the individual workman. The Sphinx of Gizeh remains in my memory as the most remarkable work of plastic art that I have ever looked upon. Dating in its first execution from times of an unknown remoteness, it was probably worked upon at later periods, notably at that of Khufu (Cheops; about 3700-3600 B.C.) Like the *Iliad*, it is an objective abstraction of centuries of human thought, a work in which the co-operation of widely separated epochs has obliterated all subjective trace of the personality of the executant. We must figure to ourselves the gigantic proportions of its impassive face, moulded to a timeless expression of mocking indifference, as they appeared in Egyptian times, painted a brilliant red and gazing fixedly, eternally, towards the rising sun.

Perhaps nowhere may we study so well as in Egypt (not even in Greece) the formulated and expressive essentials of sculptural form. Intractable material demanded a rigid simplicity of work; the sequence of traditional centuries supplied the perfection of that simplicity, which was raised to the summum of potential expression. The artistic elements thus refined were used to express thought, an outlook on the universal, not entirely congenial to our modern and western minds. Hence a certain difficulty that we find in fully appreciating the wonders both of the technique of, and of the abstractions expressed in, the sculpture of the Nile

Valley. Nevertheless elements almost identical with those of Egyptian sculpture might easily be combined so as to produce relations expressive of occidental thought.

I am tempted to make a detailed and technical analysis of the distribution and the arrangement of the planes and masses of Egyptian sculpture; but such an examination would find better place in a technical hand-book, than in a general aesthetic work of this kind, in which the chapters on the sculptor's art already threaten to grow beyond their normal proportions. After all the reader may himself enjoy in such a relief as that of Queen Arsinoe and Ptolemy II. the perfect concision of the planes, and at the same time the delicacy of the passages between them, as well as the plastic value of their co-ordinations, which succeed in giving a remarkable effect of solid form in spite of the lowness of the relief.

Before leaving the subject of Sculpture, some notice must be taken of the important branch of it constituted by relief. Relief is, so to speak, a double translation of natural form. First, the complexity of the form is reduced by the artist to a manageable system of volumes and planes. Then, these new factors are compressed or flattened into a more or less near approximation to a two-dimension state. In relief work a certain artistic hypothesis, the surface, flat or curved as the case may be, is introduced; this hypothesis once introduced, it must be jealously preserved. It is a disregard of this principle that renders slightly unsatisfactory both full relief—that is, figures completely, or almost so, modelled in the round—and the abuse, I might even say the use, of perspective. All kinds of foreshortening in relief partake of the nature of *tours de force* and have always been avoided in the masterpieces of great sculptural epochs. The introduction of perspective into relief was due to the Florentines, I believe. Its uncomfortable results may be seen in Ghiberti's famous



FLUTE PLAYER; FROM THE THRONE OF APHRODITE
(Museo Nazionale, Rome)

Shows the suggestion of full relief combined with a retaining of the sense of the architectural surface of the throne

doors. The foreshortened arm of the pedestal of the Perseo is another example of ill judgment on the artist's part, of his failure to recognise the just limits of the medium.

That remarkably beautiful thing, the throne of Aphrodite in the Ludovisi collection at Rome, contains most of the essentials of relief. There we may see in the simpler exposition the laws that govern the more complex beauty of the Parthenon frieze. The flute-playing girl is a triumph in equilibrium between plastic suggestion of solid, round form, and perfect conservation of the flatness of the throne's architectural surface throughout the planes of the figure itself. No absolute laws can of course be laid down in any question connected with art ; but we shall scarcely go far wrong, if, in the execution of relief, we first split our natural forms into planes ; and then, so to say, lower these planes vertically towards the surface on which the work is to be executed. A shortening will result in all those planes which are not absolutely parallel to the surface ; and it will become more and more marked as the planes tend, on the sides of the figure, to fall vertically towards that surface. It is for this reason that foreshortening is practically very difficult in relief ; a large number of planes have to be placed in accurate relation within the limits of a most restricted space. It is usually as well to leave aside the strict proportioning of the last nearly vertical planes on the sides of the figures ; and to cut vertically down on the background surface, in order to give final decision to the profile elevation ; while those differences of fullness of form in the middle of the mass may be appropriately flattened and reduced, in order to carry the sense of the convention of flatness throughout the work. The archaic and pseudo-archaic heads¹ of Athene on the drachmas of Athens are an example of the unsatisfactory use of forms too rounded to be in harmony with the spirit of

¹ " heads " ; for no two are alike.

bas-relief. These heads compare but poorly with the equally archaic work on the throne of Aphrodite.

Some Chinese low relief deals, as we should expect, with an equilibrium of rounded surfaces, for example, in those of the Chu Yung Kuan archway (A.D. 1345); but a closer examination will show the skilful way in which use is made of concave surfaces, which balance the convex ones, thus producing a total tendency towards the maintenance of the general plane. The reliefs mentioned are most remarkable triumphs of technical plastic art; but a detailed analysis of their qualities, of the way in which not only the height of the relief, but also its nature, varies over the whole arrangement, in strict accord with the needs of the composition, would take me beyond my self-imposed limits.

In European art the beautiful series of Greek coins affords an instructive and delightful school in which to study that form of relief best fitted to the expression of occidental thought and its logical tendencies. These tendencies are the only ones fitted, as we have seen, to sculptural transcription. The romantic point of view may give us a Delacroix or a Tintoretto, but hardly an incomparable sculptor. To witness: the partial plastic failure, despite the emotional success, of so great a genius as Michael Angelo. He was a master of sculptural technique in the widest sense of the word; and only the inspiring mind-cast was at fault in his work in stone. This we see, by comparison, when his brain works freely, in a congenial medium, in the light and shade of full emotion on the vault of the Sistine Chapel.

I have called rather particular attention to the somewhat neglected branch of art that is relief; because to produce efficient work in that medium demands a more accurate understanding of volumes and planes, the essential language of the sculptor, than is required for moderate achievements in the round. Feebleness of plane conception is more easily



STONE RELIEF OF DHRITARASHTRA, CHŪ YUNG KUAN ARCHWAY, A. D. 1345

Shows Chinese use of interbalanced curves—instead of straight lines—to create stable sculptural equilibrium

detected in relief—for the illusion of solidity here depends more on plane arrangement, than it does in the case of the already existing, completely executed three dimensions. On the other hand, especially low relief offers many opportunities to the ignorant, inefficient but clever workman to produce small work capable of hiding its fundamental weakness from the unwary, under cover of tidiness, finish and minute workmanship.

Before closing this section, and in order to avoid misunderstanding I must again remind the reader that art laughs at classification. I have extolled the low and flat relief of the Throne of Aphrodite, and have put forward the idea that alto-relievo is decadent and unsatisfactory. On general lines this is true, but we must not forget such beautiful work as that of the well-known girl's figure from the temple of the Niké Apteros; though even while admiring it to the full, one feels that the spring-time, even the summer, of Hellenic art has passed, that too close a servility to the imitative reproduction of nature is fast bringing that magnificent period to a close. I have here expressed two ideas, and it may be justly objected that low relief may be, is generally nowadays, perfectly imitative while almost full relief may be of a formulated type. At the same time the more abstract technique of flattened relief I feel instinctively to be more analogous to, and in greater harmony with, the more abstract form. Indeed the low relief of some modern artists, overcharged with drapery folds or unnecessary detail, is unsatisfactory, when compared with the general and simple surfaces of some Greek reliefs. Beautiful in their way as are the figures of Jean Goujon's *Fontaine des Innocents*, one cannot help recognising their inferiority, in this respect, to the nude flute player spoken of above. The Parthenon procession verges certainly on the detailed, but the detail is so marvellously subordinated to the sense of stability,

which keeps us in touch with the surface of the stone, that we are inclined to overlook its presence.

In the infancy of Greek art, many early figures, though detached from a background, were flattened into a semblance of relief. Such work is more interesting archaeologically, and in the history of art, than aesthetically. We see in such errors an aesthetic in formation, but not a completed one. Their discussion does not belong to the province of this volume.

In a few hurried lines it remains to trace the visible effects on sculpture of those factors of thought that produced the architectural art of the Middle Age, especially in France.

The Gothic sculpture of France gives us examples of work more truly sculptural than that of the Italian, or even of the French, Renaissance. As has been already remarked, sculpture at this period was more definitely subordinated to building interests than perhaps at any other moment. The builder's art was paramount ; whereas, in Greek times, and also during the Renaissance, sculpture as an art had an individual existence. Consequently we are not surprised to find on one hand freedom of spirit and execution somewhat hampered, which is a detriment ; and on the other a keen sense of the architectural qualities, in the opposition arrangements of mass and line, and of the conservation and fit use of the nature of the stone, which is an advantage far more than counterbalancing the concomitant restrictions. The sentiment of relations produced by straight verticals passing in the upper part into nervous curves may often be easily traced in the figures which form an integral part of the whole cathedral system. The fantastically slim figures of the main doorway of Chartres are as much allied to the simple elegance of the building, as the heavier and more naturalistic ones of Rheims are allied to the more ponderous systems of its towers. The surface of Gothic work is imbued with that



LA FONTAINE DES INNOCENTS. (Paris, Jean Goujon)

Very beautiful examples of the French sense of form. In spite of complexity of movement, the effect is very stable, while the detail of the draperies is well subordinated

same nervous simplicity as is disclosed in the ogive curve. The exceeding subtlety of co-ordination of Greek planes is looked for in vain ; in its stead we have a clear, logical simplification used as a vehicle for the psychological expression of faces in keeping with the mystic tendencies of the age. In this sense, the art is more human than is the timeless perfection of Greece.

Enough has already been said to enable the reader to continue the study of the language of form in its sculptural manifestations, to examine the complex and rounded fantasies and overflowing invention of India, to admire the skilful curve equilibrium of China, veritable symphonies in a key of curves governed by a measure that is stability. Here the frankly stated planes of Greek, or other occidental work, will often be found to be replaced by relations established among justly co-ordinated curved surfaces, which find their cause in an oriental brain formation difficult for us to comprehend.

XVII

DRAWING. GENERAL CONSIDERATIONS

SCULPTURE in dealing with the object itself, or, I should say, with a three-dimensional representation of it, calls for a convergent or centripetal form of mind ;¹ even, as we have seen, when it is placed, in the shape of relief, along a frieze where we must bear with a stated surface. In drawing, however, we have another element fully introduced into the means of expression : the surface of the paper, or other material employed. As usual our division is arbitrary ; for the drawing of a flatly treated decorative frieze, in which the artist has striven to preserve the feeling of the wall surface, at the same time that he has suggested the existence of the third dimension in his work, is so closely allied to the modelling of a low relief, that it is indeed difficult to separate them. The mental process of the artist is almost identical in each case. When, however, we leave the generally linear, and always simply determined, arrangement of a frieze, we are confronted with a new element : that of the invention of distribution in a meaning way over the surface of the paper or canvas. The pattern, already existing in the frieze in an extended state, must now be perfected and used in such a way as to concentrate the regard, which was allowed to stray along the frieze. We are at once in an atmosphere of less general outlook.

¹ See page 101, and page 267.

In sculpture the concentration may almost be said to be completed before the work is begun. The statue itself is, or may be, of an expanding nature, intensely abstract and general in spirit. In a painting, that is limited by its frame, the conception which the artist executes is spread and arranged over the surface of the canvas. This spreading is conducted in such a way (I speak of course of perspective representation) as to produce a directed movement in the mind of the on-looker, towards the mass centre¹ of the composition. We have thus introduced into the list of our means a new element of continued concurrence of integral things. It is true that there is in sculpture a sequence of planes over the surface, but planes are technical abstractions, on which the eye of the uninitiated does not linger. In a picture integral objects such as trees or figures are arranged in the inviolable order that constitutes the picture itself, and the eye goes consciously from one to the other. Already we feel here a beginning of the sequence condition of literary and musical art. Architecture first, and sculpture second, are the two arts which have used in the purest way the co-ordination of static ideas as their means of expression. Music most, and literature less so, have united ideas drawn from a kinetic source. Painting is an intermediate art, leaning, now more to the static, now more to the kinetic side, according to the artist's temperament, but it is always, of course, much more of a static than of a kinetic nature. This lesser pureness of the source of painting is probably one of the reasons for the less universal extent of its inspiring ideas. Another reason is the more emotional, or even physiological, action of colour. The sober monochrome of a Greek vase "painting" has unquestionably less action on sentimental appreciation of a sensuous kind than has the brilliant colour scheme of a Turner or a Monet. Drawing again takes an intermediate

¹ See chapter on composition.

place between sculpture and painting. It may either differ as little as we like from pure sculpture ; or it may, in excess of finished treatment in values, in light and shade, construct a veritable picture. The intention of a line may be as abstract and universal as the surface of a statue ; it may be as synthetic, as concentrated in expression as we may wish ; or, like the confused line of a Rembrandt etching, it may be the medium of expressing a psychologic indefinity, and thus become a rival of the least absolute forms of painting. The celebrated saying of Boileau "*Ce qui se conçoit clairement s'énonce clairement*" may not always be true, but in plastic questions a clear precision of line is certainly the expression of concision in mode of thought. Here, however, as elsewhere, we must learn to distinguish between the empty, smart, acrobatic line already spoken of, where simplicity is the result of studied address, of which we may find countless examples among modern pen and ink illustrations, we must learn to distinguish between it and the line of the Greek vase draughtsman who employs his line as a natural expression of direct and simple thought. The difference between such lines it is impossible to establish in words. Those ungifted with an eye for form will never succeed in feeling such difference ; music is unmeaning to the tone-deaf man, and colour to the colour-blind. Would you exercise your discernment in the matter of line eloquence ? Lay out before you a drawing from a Greek vase of the fifth century, a Chinese painting, a silver-point by Leonardo da Vinci and a pencil drawing by Turner, or examine the underlying pencil lines of a later water-colour by him. I have chosen examples in the order of clearness of plastic expression. The difference of intention in the line should be at once evident to the acute observer. These differences we will now discuss ; but it is a discussion that will take us far afield.

A fragment of line only should be regarded, for we are

not speaking here of other aesthetic elements such as composition, facial expression, convention of conception and the like. The Greek line will be seen to have a certain springing quality, a nervous something, that allows but slight variations from the straight. Beside it the Chinese line seems rounded, almost enervated in aspect. A curious similitude will be noticed between the line of Leonardo, and that of the Chinese artist. Indeed both Italy and China combine in their work the general and the particular, the universal and the psychologic; though in other respects the ideals of the European and those of the Asiatic country are far apart. On the other hand, despite the apparent simplicity of the da Vinci line one feels latent in it the *souci* of complexity, the desire of analysis that troubled not the earlier Greek, with his direct acceptance of tangible and integral things. This very directness of Greek drawing limits its range, like that of some of the best French work. The universe is reduced to an almost mathematical formula; we are allowed to preserve its essence, but hardly its aspect. In China the line is more suave, its abstraction is softened and modified by perceptions of the indefinite variations of the sensible universe, and by this addition it loses slightly in abstract universality, while gaining in a certain kind of completeness. So we are not surprised to find that the philosophy of Confucius is a Morality.¹ The balance of curves, rather than of straight lines, is in itself a less certain and direct means of expression; it is productive of a more natural rhythm. It is impossible to state which of the two, Greek or Chinese, should rank higher among the different forms of plastic expression. Such a judgment would necessarily be the outcome of personal or national preference. Anyone unconvinced of the exceedingly high level to which Chinese plastic art attains, should compare the best Japanese drawings with those of China.

¹ See note, p. 207.

The former, for all their excellencies, appear at once as very superficial and clever productions. The line seems to be the result of an acrobatic brush devoid of the more profound intention of China.¹ This fact struck me more than ever one day on coming out of the Musée Guimet in Paris. I had been examining a magnificent loan collection of Chinese paintings and drawings. In the entrance hall of the Museum there is a permanent exhibition of the finest Japanese print masters. It was impossible to look at them, so superficial did they appear, while I was still under the empire of the unusual and perfect message of the elder people's art. The loan collection was specially enlightening, containing as it did a large number of Indian-ink landscape sketches or compositions. The masterly use of limited means was extraordinary. They were mere drawings with the brush, spread washes being unused. But such a variety of handling was introduced by artists taught from childhood to hold and use a brush for the purpose of ordinary writing, that the expressive capability of the simple means was extended to an astonishing degree.

The special direction which plastic expression takes in China has already been glanced at in the chapter on architecture. The reader may examine for himself the equilibrium established among the curves of a Chinese drawing, and compare its delicate surety with the more nervous, frenetic line and accent of Japan. The Japanese is a curious example of a nation in which artistic sense is widely if not universally distributed, in which however there has been signal failure to reach the high-water mark of human effort in this direction. This people would seem to be gifted with artistic perception and receptiveness to an amazing extent; but of originating

¹ Comparatively speaking. Lovers of Japan will indignantly produce masterpieces of the Ashikaga idealists to confute me. But level for level China more than holds her own.

power to a lesser one. The key to the mystery is probably in the difference of value between the philosophies of China and of Japan. A people capable of establishing a new and valid aesthetic, a new philosophy, borrows less obviously than the Japanese have done from China. Archaic Greece began anew. We seek almost in vain for traces of Vaphio, of Nineveh, of Thebes or of Memphis in the early art of the Hellenes.

We modern Europeans labour under a great disadvantage in the use of line as a medium of plastic expression. This disadvantage lies in the fact that we are taught to hold a pen or pencil in a sloping position with regard to the paper, the hand more or less resting on the latter. Now a moment's consideration will be enough to show that in following a curved line with the point of the pencil, the angle the pencil makes with the direction of the curve is continually changing. A pencil point makes a line different in width and quality, according to whether it is used in such a way that the line traced and the pencil shall lie in the same plane or in planes more or less at right angles to one another. It is evident that there will be modifications in the quality of the line, which are due to nothing but the fortuitous directions that the stem of the pencil happens to take. These modifications have no connection with facts of volume or direction of form on the model. The only way to get a pure line result from any kind of point, be it brush, pencil or needle, is to hold the instrument so that it is presented vertically to the surface. All peoples who have shown a highly developed sense of form have always used the tool, generally the brush, in this way. The modern Chinese and Japanese hold a brush for writing or drawing in a rather complicated fashion. The wrist nearly rests on the paper and is rather sharply bent upwards and backwards; the brush is held vertically against the thumb on one side; on the other the outside of the forefinger presses against the top of the handle, while the tips of the three

remaining fingers are arranged along the lower part. The brush is thus held rigidly in the hand, and its movements are directed by the arm alone, thus permitting great control over movements which are made with an *equal facility in every direction*. This last is essential to perfect plastic drawing. Our sloping method only allows really free movement downwards from left to right, and upward movement in the opposite direction against the point is impossible with a brush or a pen, and nearly so with a pencil. Modern artists often try to get over the difficulty by holding pencil or chalk in a still more sloping way, nearly horizontally between the thumb and fingers, and turn it continuously in such a way as to keep it in a direction nearly prolonging that of the line being drawn. This produces a kind of stroking motion, which translates itself, in the line, by an uninteresting vagueness of curve, that gives a meretricious substitute for rhythmic movement of form which is sufficiently successful, however, to captivate the unwary. Let me not be thought to be dwelling unnecessarily on a simple question of professional technique; on the contrary, I am trying to indicate as concisely as possible the difference in nature between a completely "plastic line" and one only partially so. The second will represent only certain facts of the object drawn, such as its mere silhouette shape, or some quality such as fleshiness, or, at best, by means of what are technically known as intersections, the vanishing of lateral planes where they pass behind the figure and out of sight. But, not to enter into the question of thought transmission, a plastically valid line must always contain in its nature a modelling quality of solid form¹; it must, so to say, create the illusion of actual relief behind the surface of the paper, and that

¹ In art criticism any such absolute statement is at times false. I myself have deliberately flattened a volume in order to produce a desired relation between it and another modelled in relief.

without the aid of shading. To obtain a plastically valuable line we must forget that we are drawing a line on paper, we must feel as though we were carving the figure out of a soft block of clay or butter, cutting it out with a knife. This is another reason for the vertical position of the tool. The surface of the paper should not exist for us. The pencil point should seem to plunge into it, and follow the direction of an arm or a leg to and from us, just as well as up and down or from side to side. To obtain this knife-like use of the tool, Greek vase painters held the brush as one holds a dagger shut into the closed hand; Egyptian painters held the hand supine, that is the palm turned upwards, and fixed the brush (which made a straight line with the forearm) between the tips of all the fingers—this method demanded that the surface painted on should be placed vertically in front of the artist. As we have just said, a line intended to represent solid form is of no real artistic value unless it generate a sense of the third dimensions, that is, into the surface of the paper. The single contour of a figure should so fully suggest the internal directions of form as to allow us to model a statuette in clay from the sole information given by the drawing. Very few drawings resist the application of this criticism, which is, however, but a technical one, and distinct from the nature of the artistic eloquence of the work, though it is true that real success in one is usually accompanied by success in the other. An example of a high degree of plastic sense of volumes suggested by mere contour, allied to a feeble artistic message, may be found in some of the later nude drawings of Rodin,¹ wherein the line is pregnant with suggestion of modelled form, but almost silent as to original intention and synthetic rhythm; the rhythm, without which it could not be suggestive at all, is a transcription of the natural rhythm of flesh and bone sequence.

¹ Though often his drawings are curiously flat.

This plastic property of the line is due to no observable qualities—at least I have never been able to isolate or even detect those which cause it. One can only explain it by saying that the relations established between its several parts are of such a kind as to suggest the contemporary existence of other juxtaposed relations outside the plane of the paper, which relations would seem to accompany in a natural way those actually expressed by the line. Such an explanation really only amounts to a restatement of the proposition in other words. But is not that the nature of most explanations? The one thing that can be known with certainty about this very subtle phenomenon is that it is a faithful material transcription of an effort of the mind. At the moment at which my pencil is actually moving over the paper, and without examining, or even seeing, the line it is tracing, I can unhesitatingly say if the line I am drawing is, or is not, plastically valuable. If I feel and understand fully the movements of the model's form to and from me, as well as those in the transverse plane, I am producing a good line; whereas the moment I cease to take in the "third dimensional" arrangement of volumes and planes, my line ceases to contain in its nature the suggestion of their existence. Time after time I have controlled this point experimentally. It is one of those questions in which the ability to execute throws a little light on what would otherwise be a very occult problem.

Perhaps some further explanation will render the subject slightly clearer. It will be remembered that, in the chapters on sculpture,¹ attention was drawn to the need of working in volumes, seen "to and from" one, and not only laterally, and to the necessity of retaining the examination of the profile for purposes of control and correction. The same method of work should be adopted in drawing; only here

¹ See page 177

it is still more difficult, for the pencil line does not allow us to treat each element of the form separately—at least it does not if we eschew a laboured and tentative technique which counts on corrections and rubbings out. We are obliged to consider simultaneously: the proportions, the nature of the surface curve, its placing in space, and so on. We are forced to unite all these observations and reasonings in an unique and almost instantaneous brain effort. This effort is a very considerable one, and few succeed in maintaining it right to the end of a figure study, although the making of a complete drawing needs only a few minutes, if it be executed in this direct fashion by a single unerring contour. Hence most artists prefer to split up the work by sketching lightly in the general proportions and movement of a figure, before attacking the final determining line, thus dividing and reducing the difficulty. However, the first fine immediate line always has a plastic quality, an unhesitating rhythm, a swiftness and truth of impression, that subsequent efforts never have. The lack of this quality may be balanced by the achievement of others. A studied drawing may be, will probably be, more synthetic in nature, or more statuesque; but it will never possess the certain transcription of that subtle thing that is the product of the reaction of a moment's state of the model on a moment's attuned sensitiveness of the artist's being, so under the empire of his impression that doubt or hesitation are unknown to him.

Of course such work is impossible in the execution of a picture, or of any composed arrangement, where the loss of the immediate quality must be counterbalanced by a kind of general mean sensitiveness, to which level the various parts of the work are either raised or reduced. This is what happens in Greek vase drawings, which naturally were not executed from the model. First, a light sketch was made, probably with a wooden point on the unbaked clay, leaving

a very slightly incised trace still visible on almost all the best vases. The background was then painted in, and the fine lines of the figure ultimately drawn with a single bristle brush.

It is only in the countries in which oil painting has been developed that carelessness of expressive plastic form is to be found. It was this fact that was dimly perceived by William Blake, when, without deigning to give us further explanation, he announced that oil medium had been the ruin of the painter's art. He is perhaps the only Englishman who really aimed at the use of plastic line; he gave to his line plastic modelling qualities, as well as using it synthetically as a transmitting medium of his artistic message.¹ Moreover his composition was marvellous.

Among the earlier artists to whom form was wonderful, this sense of the value of line in the representation of it, this instinctive feeling for the properties of a swiftly executed, unhesitating transcription of the artist's intention, is shown by several stories which have survived. As analytic criticism is but modern, elder artists did not stop to study the real reasons of their instinctive feeling. So the story of Giotto and his circle traced at once and unerringly before the pope's messenger may be read as a mere example of the skill of a clever workman,² but it really means more than this, although perhaps Giotto himself did not clearly realise it. The proof that it does is given us by the use to which he put this skill of hand in tracing undoubting contours to synthetised volumes in his frescoes.

When skill is insufficient, the hesitating retouched line is

¹ On the contrary the line of the celebrated Flaxman drawings is a mere superficial imitation of classic models and void of plastic intention; it was a frigid and conventional thing (in the evil sense of the phrase); as much as a Greek vase drawing is a delight, so much is a Flaxman chilling and annoying; so, outwardly, may things resemble one another; so, inwardly, may they be asunder.

² See Appendix.

generally lacking in that homogeneity of relations within itself, *i.e.* in the direction of its length, which seems to suggest the existence of the concomitant relations of the surface enclosed by it ; and so to give the appearance of relief.

The love of the swiftly traced line capable of giving not only a gay and springing unity of rhythm and being, but also possessing those qualities of plastic form, so ignored to-day, and of which one cannot speak too often, comes out again in Pliny's Anecdote of Apelles and Protogenes, competing between themselves to decide which of the two should trace the most perfect and most tenuous line.

But before discussing further the differences which may exist between the merely skilful—in the best meaning of the word—and the fully valid line, we shall do well to examine a little more completely a subject that has already been touched upon ; and at the same time attention may be called to the fact that longitudinal rhythm of line is discussed on page 253 of the chapter on Light and Shade.

XVIII

FORM IN DRAWING

So closely intermingled with drawing as to make an indissoluble part of some manifestations of it, is the subtle ingredient : form, or rather what is known in French as *la forme*, for that particular meaning is never attached to the English word.

This exceedingly delicate question has already been treated in the second of the chapters on Architecture (see page 146), but the difficulty of its exposition will perhaps justify a renewed attempt.

Even in French, it is very difficult to define exactly what is meant by this term, at once wide and restricted in application. When we have a just comprehension both of its extent and of its limits, we understand the attraction that such writers as La Fontaine, Racine or Molière exert on some minds, on account of the observance, use and manipulation of it, and the like repulsion that Shakespeare and Dickens may produce on account of their neglect of this artistic quality.

We have already seen that one of the twenty-five meanings given by Littré to the word *forme* is : *Manière d'agir, de s'exprimer*. One might with some degree of correctness call *la forme* in art a manner of acting or of expressing oneself, but we must qualify this statement by adding that this manner must be restrained and governed ; and that it must

be of a positive marshalling nature, and not merely an unqualified manner of acting.

The positive presence of *la forme* in the writings of Racine counterbalances the detriment which would ensue from his lack of varied richness of imagination. *La forme* is indeed intimately allied to the restrained and ordered choice that wilfully discards superabundance of material.

But *la forme* must not be confused with composition. The composition of such writings as those of Anatole France is their weakest point; it may often be said to be non-existent. His *forme* is super-sensitive. The composition of Shakespeare's work is often masterly; *la forme* is either rudimentary or unknown. *La forme* is a more intimate and ever-acting force which moulds the presentation of each idea, and keeps it clear and distinct by controlling each element of it; composition is the arrangement, the marshalling in order, of the totality of presented ideas.

The relations which constitute *la forme* are the result of more immediate contiguities. Also we may say that *la forme* is generally imbued with, and expressive of, certain traditional laws. It is in short in antagonism with the tenets of romanticism, with the romantic belief in emotional effect at any cost. *La forme* also carries with it ideas of precision, but of expressive precision as distinguished from passive tidiness and finish.

As an aid to my exposition of this difficult point I may call in the sixteenth chapter of Coleridge's *Biographia Literaria*. It is one of the shortest if not indeed the shortest of the book, and in it he treats of the difference between the poets of the present (*i.e.* his own) age, and those of the fifteenth and sixteenth centuries. Although this antithesis is not precisely equivalent to that established by the presence or absence of *la forme*, his considerations will at least be helpful in the understanding of the latter quality.

After pointing out that the modern poet seeks, above all, new and striking images, and renders both his characters and his descriptions, as much as possible, specific and individual, even to a degree of portraiture, Coleridge accuses him of being comparatively careless in his diction and metre. With such a state of things is contrasted the habit of the more polished parts of the former centuries, especially those of Italy. "The imagery is almost always general; sun, moon, flowers, breezes, murmuring streams, warbling songsters, delicious shades, lovely damsels cruel and fair, nymphs, naiads and goddesses, are the materials which are common to all, and which each shaped and arranged according to his judgment or fancy, little solicitous to add or to particularise . . . In opposition to the present age, and perhaps in as faulty an extreme, they placed the essence of the poetry in the *art*. The excellence at which they aimed, consisted in the exquisite polish of the diction, combined with perfect simplicity." Now all this might have been written about plastic art; it would only be necessary to substitute the word *drawing* for the word *poetry*. The modern draughtsman seeks to render his subject eloquent; the renaissance artist, or better still the classic, places his faith in the treatment, in the perfection, in the eloquence of the form¹ itself, or in its schematic representation, the line.

¹ It will be noticed that I renounce the use of the French word *la forme* and continue henceforward to employ the English term in both (indeed in many) senses. The reader will either instinctively feel which meaning is meant; or he will fail to grasp the conception I have attempted inadequately to put forward. In the latter case he will read into my phrases meanings different from those I intended, but not for that reason in complete variance with the truth. It is this possibility of understanding any single phrase in more than one way, which renders a satisfactory definition of the idea impossible. I resign myself to a confusion of terms I would fain avoid.

I am writing in English, which is a language unconsciously composed by the English people to express English ideas, on a subject

The rhythm of the line is justly looked on as a more beautiful thing than transcribed psychological emotion. Vague enveloped nocturnes, profundity of obscure mystery are not in themselves specially beautiful in a plastic way. They contain none,¹ or but very few of the elements of plastic beauty; and when treated as works of art they amount much more to communications, from the artist to his public, of a sentimental state of mind than to deliberate, tangible, existing creations of plastic beauty, valid alone in plastic isolation. There is nowadays a confusion of thought, a confounding of moral or emotional beauty (so called) with plastic absolute beauty. One would like to fancy that this confusion of idea did not exist in earlier times. I have already called attention to it elsewhere. As a result of this condition of things we find many people to-day who believe themselves endowed with an appreciation of plastic art, and even set themselves up as professional critics, when really their only baggage is a receptiveness, by a kind of hypnotic suggestion, of a vague emotion similar to that which the artist feels himself, and which his audience, though perhaps not gifted with the technical skill of arranging paint on canvas in such a way as to transmit it to others, is just as capable as he of feeling.

Classic art is almost entirely free from this emotionalism; and that is why most people who extract considerable pleasure from modern painting, or even from that of the Italian

which has never found place among the English ideals. Every word I employ is thus the symbol of an English idea, and not of a French, a Greek or a Chinese one.

Philosophic readers will probably recognise the presence of *forme* in the philosophy of Descartes, in spite of a certain lack of *forme* in his literary presentation of it, and the absence of *forme* in the system of Kant. Musical readers may compare Beethoven or Wagner with Rameau.

¹ The exigencies of explanation oblige me to exaggerate.

renaissance, feel themselves bored and uncomfortable in presence of the pure plastic music of Greek form. One may safely say that he who is not *more* receptive of the beauty of a Greek statue (does not *prefer* it in short) than he is of the emotionalism of a modern painting, is not a critic of plastic beauty ; his sense of it is not sufficiently developed. He may be an excellently sensitive judge of the relative values and intensities of emotional psychologic states, he may be particularly sensitive to the visual means of transmitting them, but he is *not* attuned to the note of absolute plastic beauty, and when he admires those intermediate artists—that were the renaissance Italians—it is the emotional success of their work, and not the formal plastic one, that calls forth his praise. Because one feels profoundly moved before a modern romantic painting (shall we say a Jean-François Millet or even a Monet, or again, leaving painting, a Rodin ?) it is no more proof of sensitiveness to absolute plastic beauty (though of course both capabilities may be present at once) than it is of the comprehension of the equations of Lagrange.

Only the other day I came across a curious instance of blindness, on the part of a professional critic, to certain essentially plastic qualities. Samuel Prout received from him rather rough handling compared with a modern painter of mysterious London. Prout is accused of choosing the obviously picturesque, while the later artist is congratulated on endowing with " beauty " things, not lovely in themselves, by shrouding them in the mystery of atmosphere and night. The critic even goes so far as to appreciate the fact that the houses have no longer any positive being, that there is no reproduction of their unlovely forms. Apart from such inevitable plastic elements (and they are the least formal ones) as the arrangement of light and shade, and a scarcely existing use of colour, such painting is as empty of plastic formal beauty as it well may be. It is art reduced as far as

possible to an account of a moment of psychological sensitiveness and emotion, it is subjective and particular in the extreme. Even the greatest of all chiaroscurists, Rembrandt, although he never used the eloquence of form, at least fully appreciated and rendered solidity, thereby rendering his art based and enduring; he instinctively felt his art to be indebted for its very existence to the impressions he received from the solid and tangible universe. Look again at the dream renderings of fair colour that flowed from Turner's brush, they are all founded on form which springs from authoritative knowledge, the tints are led over infinite variations of modelling. Drawing has in these two great artists at least the stability of eloquent form, if it be deprived of the latter's intentional rhythm. Our critic reduced the art of Prout to an eye for the picturesque, and to a cleverness and address in arranging groups of figures to add to his pictorial effects. I have by me some Prout drawings of Venice. I turn to one of the Piazzetta and the Ducal Palace. I find a most ingeniously established sense of stable equilibrium of form; I say advisedly *ingenious* and not *inspired*, for of course Prout, judged by the highest standards, remains mediocre. Everything appears endowed with vertically acting weight, everything is solid, and what is more, a most gratifying series of relations are established between the horizontal and vertical directions, which almost entirely compose the picture; we must except the rising line of the Bucentaur deck, and the slightly leaning figures of two gondoliers—all the others are standing upright—these are the only derogations he allows himself from the imposed principle. Whistler might have christened it: A symphony in the vertical and horizontal, had he himself been sensible to form beauty. We are already far from mere address in arranging figure groups, and farther still from the formless emotional mystery of the modern London painter who was

praised at Prout's expense. The critic was blind to those beginnings, slight though they be, of formal beauty, beginnings that compensated fully for emotional inefficiency on the part of Prout. The modern painter had almost completely succeeded in banishing form from the transcription of his emotional state. It is true that the broken and picturesque line of Prout is not adapted to any transmission of plastic intention. His feeling for form begins and ends with his sense of the arrangement and use of its qualities of solidity and general direction.

I shall certainly be accused of partiality for formal expression. Being a plastic artist, I prefer form to emotional methods of expression. Nevertheless I keep this personal preference distinct from my estimations of artistic productions, and only ask whatever be the ideal the artist propose to himself it should be thoroughly carried out. The careful reader will notice that I vouchsafe as much praise to Turner as to Douris,¹ probably more, for Douris was not a great genius, his qualities are rather those belonging to his time. If I speak more of the class of art of which the latter may be taken as an example, it is because this side of the question is the one least understood and appreciated in modern England. Indeed I myself admired Turner to the full, in days when the more abstract qualities of the Greek vase painter would have found me inapprehensive. In latter day England we are, alas, too deaf to this incomparable language, to this music of form, to-day drowned in the impression and envelopment of the oil-brush or in the hazardous flow of water-colour, both of which mediums are only fitted ² to the expression of

¹ Douris, about 500 B.C. Greek vase painter; with Euphronius, Heiron, Brygos and others.

² Water-colour may of course be used in an absolute way. The Chinese paintings are executed with water medium. It is impossible to obtain really pure form with oil paint. I have given it up in despair and taken to tempera, which is almost as ill adapted to an

the romantic confusion that slowly rose out of the later renaissance. The Chinese landscape sketches, of which I spoke above, innocent of flowing wash, take, in technique, an intermediate place, between the tenuous line of Greece and modern enveloped methods. The body of a Chinese brush is often stiffened with some kind of glue, leaving only one-eighth inch of inflexible hair at the end. The tip only is used to contour thoroughly conceived solid volume forms, though thickenings, thinnings, and disappearings of the line are cleverly employed to extend the range of representation of the quality or material of the object, a question that troubled but little the sixth-century Greek.

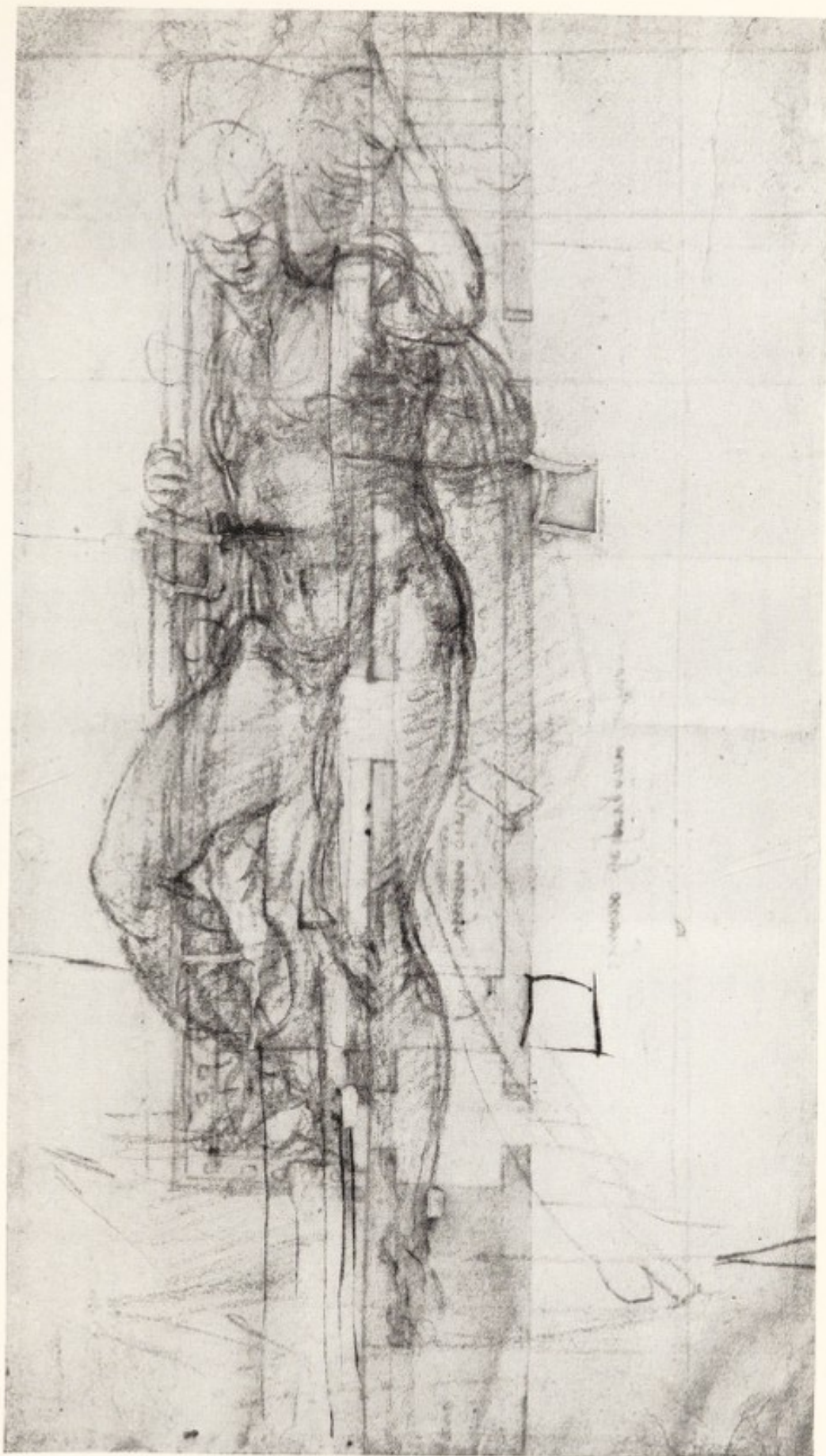
A lingering desire and affection for this synthetised, abstract, purified form has always subsisted in France, even through her most stormy romantic period. The wit of Voltaire rises in revolt against the nature preaching of Swiss Rousseau; "A little more and he would have made us browse," laughs the mockery of the author of *Candide*. Though Victor Hugo has produced the involved, disordered, uncontrolled light and shade of the *Légende des Siècles*, ponderous and overwhelming in conception, the classic polish of form of Racine, of La Fontaine is never lost to sight. How can it be, for the very shape of the words and phrases of the language are moulded by the forces of which such authors are the expression? As we have said, the British lack of understanding of the message of abstract form is what makes the French classic authors so incomprehensible to English readers. They seek in French books or plays the redundance of imagery, the inconclusiveness of the directly suggestive indefinite art of Shakespeare, and do not find it. Now complex vagueness is just as annoying to the French enveloped technique as oil is to a precise one. Finish must not be confounded with precision of formal expression. Dutch still-lives, as finished as possible, are empty of precision of expressive form. The shapes are accurate but not eloquent.

mind, as the dry precision of polished form is to the English one. But this is precisely the reason why there have been sculptors and draughtsmen in France, while England has produced only a single example of either : William Blake. As I write comes to me the memory of one canvas by Etty (I believe in the Tate Gallery) of a woman bathing. She is up to her knees in water, and leaning forward. One feels in this painting the beginning of genuine understanding and application of form. The sculptural form of determining intentional curves exists, but on the whole the spirit of the thing is romantic and emotional with a too decided imitation of flesh quality. I trust I have made sufficiently clear the difference between the extraordinary perfection of a Turner drawing, with its masterly analysis and rendering of the essentials of natural form, and the almost totally opposed ideal of intentional form expression, in which the aim is not to represent the appearance of things, but to construct a means of expressing the artist's mode of thought ; of course this means is based on observed facts of nature (it can be based nowhere else), and consequently it contains a representation of the essentials of these facts. Thus one can conceive of two drawings, really widely separated in spirit, bearing a close resemblance one to the other. The directly representative drawing executed rapidly would only be able to contain the essential construction and movements of the form, while detail would be suppressed for want of time to execute it. In this way the drawing might seem to be very akin to the intentional one of a synthetic artist, who is also obliged to remain within constructional limits, and to express the same facts in his work. There will be, all the same, a certain complication of sentiment about the most summary romantic or emotional sketch, that betrays its origin and differentiates it from the more abstract precision of the other. Leonardo da Vinci, by reason of both his date

and his nationality, affords an excellent example of the balance of the two tendencies. He is governed by an intense interest in form for its own sake. He is in touch with the modes of thought of his predecessors, whose art and philosophy were still, in part, absolute. But he himself is a forerunner of the new inquisitiveness, of the analytic and scientific spirit at that precise moment nascent in the world. To the first of these tendencies we are indebted for the delicate and direct line of one of his silver-point drawings, which is every whit as distinct in its tracing as one by Douris or Brygos, and the result of far more complete knowledge. A more careful examination and comparison of the Italian drawing will disclose a feeling of complexity, an undecided undulation in the line itself, a suppleness of form fading into form, which denotes the hesitating, searching mind of modern Europe, as certainly as do the much described mysterious, psychological, unfathomable expressions of Leonardo's faces. The Greek conception of form was plane and mass intentionally arranged against mass and plane, with such exquisite accuracy as to produce eloquent relations of a clear and seizable nature. In the line of da Vinci the philosophy of Bergson is already foreshadowed, Darwin is possible, the absolute is no longer there. In spite of the precision of execution it is impossible to mark the point in the line where the form changes in direction, unless the change be such a marked one as may be indicated by a deliberate intersection or cusp. In other places the shapes pass, with a wavelike movement, one into the other. Their transcription is the work of a brain belonging to the same class as that which shall conceive of the passage of species into species, by way of intermediate type, or, again, look on movement as whole and indivisible. The form of Pheidias, still Greek, is free from this indeterminate quality. The uncountable planes produce simplicity of effect by virtue of the careful

relative adjustment of their positions, a relation which is constant throughout the statue, and is, indeed, the work of art itself. Compare the constant of the arrangement of the planes of Praxiteles with the constant of a Pheidias. The former will be found to be of a less *brusque* nature than the latter—words are impotent to describe such subtle difference—but in neither case is the definiteness of a plane sacrificed to envelopment of surface. The excellent language that is form to those receptive of its meaning! Piero della Francesca in, for example, the frescoes of Arezzo, may be taken as one step nearer the absolute, and back from the doubt of Leonardo, Michael Angelo as another forward towards the chaos of romance.

The line of Piero is precise and definite, but the rhythm established is dubious and vague and imbued with sentimentality. In a Michael-Angelo drawing knowledge is great, *fougue* unequalled, the sense of solidity of the form is perfect, and the plastic or modelling quality of the line is as great as it well can be. At the same time the plastic *intention* has already disappeared, giving place, completely, to the new emotionalism, and to the new analysis. The line has become picturesque, and, in gaining in obvious strength, has lost that more subtle force of control and of measure. This is why the sculpture of Michael Angelo is so inferior to the paintings of the Sistine Chapel. Picturesque emotion, which is fitted to enunciation in paint, is contrary to the nature of the sculptor's medium. The material stability of sculpture demands a more clearly arrested, a more absolutely established mode of thought than was his to inspire it. The relations established along a Michael-Angelo line are of the flowing enveloped kind, copied from the ceaseless flow of the universe, instead of being of the stable abstract type essential to the best work in sculpture. Of all sculptors worth considering Rodin is the least sculptural. His confusion of



MICHELANGELO DRAWING. (Oxford)

thought, his indefiniteness, are ten times worse than those of Michael Angelo, and practically his only claim to success lies in his imitative mastery of flesh forms.

The natural French spirit, clear, decided, logical, but withal slightly dry, finds expression in the early renaissance drawings, of which the intentional abstraction is often distasteful to the English. The line, less *savante* than the Greek, less regularly reduced to a formula than the Egyptian, has a light and disconcerting rhythm of a nervous kind that Englishmen, almost with a sigh of relief, see discarded in the romantic drawings of Jean-François Millet. It is this sentimental element which saves for their approbation the work of renaissance Italy. The evident energy of Michael Angelo, the open psychological mystery of Leonardo, are what please a people inclined towards literature. Ruskin falls in adulation before the love of nature shown by Giotto ; he writes pages against the study of anatomy, which, he says, caused the downfall of art, and he fails to see that he alternately praises and condemns the same thing. It is not knowledge that kills the artistic force and value of a line ; it is the use that is made of that knowledge. Had Ruskin understood the essentials of sculptural form, his work would have been far more valuable ; he would have spared us ridiculous antinomies. Ruskin was only capable of clearly recognising excellence of imitative form ; to plastically eloquent form he was almost blind. I say almost, for he evidently had a dim sense of the success and value of plastic excellencies by reason of the extensive studies that he made of art. The artistic sensibility cannot be entirely insensible to a whole branch of the subject. It was in seeking to explain and justify these subconscious appreciations that he involved himself in error and confusion. His sole declaration that nude study is unnecessary is enough to proclaim him inappreciative of perfections of plastic form. No other schooling can replace that

one ; and probably the want of appreciation of delicacies of form among northern peoples is not unallied to the want of habit of having the nude or semi-nude continually before the eyes. Certain sojournings in Africa and the East have been of incomparable use to me in developing a sensitiveness to formal impressions. If we only see clothed human beings or fur-covered animals, we look on the main points of construction of the bony framework as essential—as indeed they are ; we consider the arrangement of large planes, or we consecrate undue attention to the only parts of the body that are visible, the face and the hands. These are the most complex in evident detail of all portions of the frame. From such elements is built up the kind of drawing that finds its highest expression in the work of Millet or of Rembrandt, in which construction and general movement are perfect. The shoulder-bone forms are correctly placed, the elbow follows in turn, but the intervening forms that the eye is less in the habit of seeing lack in rhythm. To both artists the natural sweep of forms ever new, yet ever controlled, of youthful nude perfection is strange. Their nudes are mere nudes, they have not the normal existence of the Greek artist's vase drawing, governed by an eye accustomed from childhood to the peerless spectacle of the gymnast's naked frame. It is true that form is to be found everywhere, but nowhere else than in the human body are so many elements of its perfection to be found at once. Though the curve of a wave may be as subtle in variety as the profile of a nude, it is too fleeting, too continually changing, to be of use to the student. Plant form is not sufficiently definite in arrangement to allow of absolute criticism, the *sine qua non* of exercise work ; slight errors in plant drawing are quite imperceptible—not that masterly drawing is not as evident here as elsewhere, though mediocre work is less easy to criticise definitely. Again, the marvellous study that the

mechanism of the human body affords is the best of lessons in equilibrium of elements, the opportunities for studying a thousand variations of stable balance of parts is unequalled, the larger relations pass to smaller relations which are continually readjusted among the smaller intervening forms. These smaller relations, that are masked in the clothed figure, are really necessary for a correct and full comprehension of the rhythm of relations as a whole.

NOTE.—It occurs to me to-day (1924) that the phrase "glyptic form" might in many cases prove more suggestive than "plastic form." "Glyptic form" would carry with it over and above the suggestion of solidity that of a certain polished perfection of sculptural intention. However I do not change the text; I only ask the reader to bear the possible modification in mind, and make it appropriately.

XIX

DRAWING IN PAINTING

It seems that one should restrict the meaning of the term drawing to more or less contoured representation of form, and speak of such a painter as Velasquez as being a master of realistic impression of form. Otherwise we find ourselves led by insensible degrees into the making of statements like that one rife some years ago among impressionists (and due, I believe, to Monet himself): Drawing is values. Such amiable paradoxes are nothing but deliberate attacks on definitions of terms. They add unnecessary confusion without possessing the saving quality of wit. What the phrase means, if it mean anything, is that when you have established your relative values ¹ correctly, your form will model itself; as one value passes into another the change of value will correspond to a change of surface direction on the model, and consequently will reproduce the impression of relief. Relief was practically the only part of formal production that the impressionists troubled about, for they were never so much engaged with the actuality of things as with their appearances under different effects. One of the principal things we notice in painting from nature is the remarkable number of " passages " or places where the mass of one object seems to merge insensibly into that of another; the merging is due, of course, to coincidence of value between the two parts. By one of those apparent contradictions of which art

¹ See Chapter XXI.

is full, the more of these passages we observe, when painting in a Velasquez or in an impressionist way, the more solid will our presentations seem to be ; the more we mix up background and figure, the more the latter will stand out from the former ; and the more the variations of values in a background are studied in relation to those of the figure, in other words, the more carefully the background is modelled, the more the figure will detach itself and take on solidity and tangible substance. The reason of this is easy to understand if we remember that we are talking about imitative or illusionary painting. Naturally the more completely the illusion is carried out, as all the parts react on one another to produce the illusion, which only exists by virtue of a similarity of the total painted relations to the total observed relations, the more perfect will be the illusion in any given place. It was a knowledge of this fact that prompted the famous reply of Van Dyck to the statement that a proposed apprentice "already knew how to paint backgrounds." "Does he?" replied the master, "then he knows more than I do." Eugène Carrière was always pointing out to us the "movements" of light and shade over the background, movements which "held up," "supported," as he said, the figure. This reduces itself finally to this, that the best workman is the one who best realises the relative importance of the minor relations, who, in consequence, maintains the translation of relations in the same way, indifferently over figure and background alike, because he understands that the realm of his artificial relations is only bounded by the frame, and that under menace of failure to construct a complete illusion, his transposing or translating must not cease till he gets to that boundary. The want of power of conviction on the part of so many "realistically" painted pictures, but which are studio products, may often be explained by the fundamental relations of the background,

say a landscape, not being quite identical in kind with those of the studio-studied figures. The picture seems to be in the same key ; similar tints are found all over it ; values seem to be perhaps reduced to a common convention ; yet the whole remains unconvincing.

When we remember what a remarkable convention line drawing really is, we can understand without difficulty that a school uniquely aiming at representation of nature, and trying as far as possible to banish convention and the use of formulæ from its work, should announce that kind of relation that we call values as pre-eminent. It is only the habit that we have contracted, dating at once from our own infancy, and from that of mankind, that makes it possible for us to accept a few black lines as a schematic transcript of objects which we really see by light and shade and colour impression on the retina. Line drawing is inconsistent with the true impressionist doctrine ; for we do not receive an impression of line or even contour from objects. The line of the line draughtsman is the result of a deliberate mental abstraction ; and for that reason it is less agreeable, as I am certain it is, to the larger part of the modern world ;¹ if we do not count a few who have elected to study the subject specially. The more a drawing is finished in modelling and light and shade, the more it tends to become a monochrome picture ; and the difference between the two becomes more and more an arbitrary museum or gallery catalogue distinction. The more the means of representation becomes arbitrary, in this case the nearer one approaches to the simple line, the less imitative illusion there will be about the work, and the more this loss of direct suggestion will have to be made good by introducing into both line and composition certain abstract

¹We must carefully distinguish the admiration for the tidy adroit workmanship of a fine drawing, which many feel, from a real artistic appreciation of its merits, and a genuine love of that means of expression.

qualities to take the place of those bonds of union between the work and nature that we have voluntarily thrown overboard. This is the reason for the chilling failure that we find in most intentional imitations of classic formulæ. To draw with a single line, as a Greek did, is not to have the "ideal" and the mental position of a Greek; and that is what really is expressed in the relations established from point to point along a line drawn by his brush. The synthetic simplicity of his line was the immediate reflection of his philosophy, of his mode of thought. The would-be simple line of an inferior modern pen-and-ink artist is a commercial calculation. It is so drawn because it will look well and clever in the reproduction. It is an acquired artificiality, a workman's trick. Its author will probably naïvely expose his inconsequence in manifesting an admiration for Beethoven and Browning, while the polished form of Racine—to say nothing of the Greeks—will leave him unimpressed. The experienced eye at once differentiates the sincere line, dictated by the real personality of the artist, from the academic or commercial production. I have never yet seen one of the latter lines valid; for one reason because the authors of them find in their comfortable facility no use for that intense and fatiguing application of the mind in observing and translating, in projecting mentally on the paper, a solid conception of the object; either the outline is left flat, or the form is rounded up by judiciously distributed shading. I believe the effort to understand in three dimensions was less in the time of Douris than it has since become. This is owing to the unconscious eye education that we have undergone, thanks to modern painting, which has taught us more and more to see objects flatly by their colour and light and shade arrangements.¹

¹ This I wrote ten years ago. To-day we are already feeling the effect of the cubist movement. In the Salon d'Automne, 1923, the sense of solid form has taken a definite and evident place.

The unreasoning distinction habitually made between draughtsman-painters and colourists or painting-painters has frequently been attacked. We are told that there are as many different ways of drawing and of colouring as there are artists. Certainly. We are then told that there is, in the work of a great painter, a harmony between the nature of the drawing and the nature of the colour, and consequently that, given the greatness of the canvas, all forms of drawing can be equally great. But here it seems to me there is an error. Unquestionably the drawing of Delacroix, that has been called bad, harmonises perfectly in its romantic recklessness, its feverish haste, with his colour equally rich, careless, at times inexplicable, but always arresting. But such uncontrolled emotions are precisely those best expressed in colour and chiaroscuro, which, so to speak, drag after them just so much irregular, ungoverned form as is necessary to complete the vision. Surely it is unjustifiable to place this subservient completing form on the same level as that which is in itself the main expression, to which colour, this time of an unemotional type, plays, in turn, the second part. In each case the nature of the colour is the same as that of the form allied to it ; but when the idea expressed is a romantic and emotional one, and consequently somewhat vague, the expressing terms are vague. Now vague form is scarcely more than arrangement of mass ; it is necessarily deprived of the particular eloquence of controlled rhythmic surface. It seems then that volume expression and surface expression together, should be considered as superior to expression counting on mass alone, or simply supplementing it by imitative flesh or other natural surface rhythms. The unbiased examination of any particular line from a drawing by Delacroix, by J.-F. Millet, or by Rembrandt ; and a subsequent comparison of it with a line from a Greek or Chinese drawing, or even from an Italian Renaissance one, drawn



A GREEK VASE

Shows beautiful sense of 'pattern' decoration combined with tendency towards the right line, the curves of the drawing being exceedingly 'elastic', resembling those given by spring steel bent momentarily from the straight. They should be contrasted with those of a drawing by Michelangelo

before the time of Michael-Angelo and Andrea del Sarto, will show clearly what I mean. The fragment thus detached from the emotional work at once loses all its value, becomes, in fact, a mere scribble. Its expressiveness does not lie, or hardly, in the arrangement of its own parts, but in the position it occupies in the whole scheme of relations that make up the picture. On the other hand the Chinese or Greek line remains an intensely beautiful and intention-filled thing depending on its own internal relations (as well as on those generated by its position in the whole work), which persist even after its isolation. I cannot help regarding this latter type of formal expression as a more elevated one than the other.

Romantic drawing with its carelessness of glyptic surface, may be said, roughly, to have commenced with Michael-Angelo. The East has never, even to-day, felt the need of a confused means of expression; and the complicated metaphysic of India has materialised itself in manifold repetition rather than in vagueness of surface or line, though the even, rounded curves of the latter announce less subject matter for eloquence than do the more nervous ones of Greece, or the more rhythmic undulations of China. Michael-Angelo was still restrained by the half plastic tenets of the first renaissance. After all he practised sculpture, and, despite the Sistine Chapel, he preferred calling himself a sculptor. Again, he lived among mountains,¹ and in a country whose seductive shapes tempt, lead on, and influence the mind by calm magnificence. So the stormy fury of his masses, hurled one against the other, petrified to strained, enforced repose—if, indeed, of a verity repose there be—is still tempered first

¹ Of a moderate height and not of the chaotic dominating nature of the Alps. The really high mountain does not seem to be productive either of architecture or of sculpture. This is possibly due to the centralising of civilisation in the plains and great valleys, and not to the inappropriateness of the artistic influence of mountains.

by a wonderful knowledge of every detail of the human body, and then by an after-glow of that *souci* of surface for its own sake, or rather for the sake of those general and abstract ideas that may best be expressed by it. Otherwise more than one drawing of romantic Millet might well be attributed to the great Florentine, were not the Frenchman's absolute knowledge manifestly less.

Andrea del Sarto, purely a painter, gives us a line, a concept form still farther from the plastic ideal. The line itself has now lost all positive expression, it plays a neutral part and serves, obediently, the needs of arrangements of caressing colour harmony. We have not yet reached the degree of Delacroix's drawing, where even facts of construction are violated in order to produce intensity of movement or emotion. Here one might note the difference between the constructional violations of Greece or Egypt and those of the romantics. The head of a Greek dancing girl will be turned impossibly backwards, until she looks directly behind her. The reason for this is complex. Undoubtedly the main consideration on the part of the vase artist was to avoid the difficulties of drawing a three-quarter face. At the same time the thing is so skilfully done, that it is long before one notices the impossibility of the movement. Again, decorative work whether in relief or in painting is always better reduced either to one, or to quite a few clearly defined planes ; but for a fuller treatment of this point I must refer to the chapter on Composition. The last but most important reason is that the directly backward look brings into play just that oppositional direction that exactly counterbalances the forward movement of the dancer, and so produces that sense of stability, of equilibrium of parts which is such an important factor in plastic formal expression. The violation of the possible here enters into the scheme of equilibrium of the conception. I have in my mind's eye the incorrect drawing

of the wrist and hand of an Algerian girl in the big canvas of Delacroix in the Louvre. The arm looks almost boneless, and passes by vague curve and unestablished plane into a hand as free of anatomic science. But this curve, this hand and arm, ugly in themselves, are only a part of a co-ordinate whole. They are no worse and no better than the rest. The eye slips easily along the free carelessness of the curve; becomes excited, intoxicated with the motion; enters into the life and atmosphere of the situation and loses consciousness of right and wrong; casts control and measure to the winds. This time the violation is not so much an ingredient of the absolute beauty of the work, as a direct seduction, a hypnotism, an excitation offered by the artist, and directed by him at the emotional sentiments of his public.

It must not be thought that mere precision and tidiness are enough to communicate a high degree of expression to a line. Indeed if the nature of the artist's message be a purely sentimental and emotional one, he should guard himself against the confining of his execution. The very quality of his work being *fougue, emportement*, intensity, control would only destroy this quality without bringing others in exchange; his work would become simply cold and unconvincing. The greater number of artists occupy indefinite and intermediate positions in this question of form. Those of England in particular do not enter into our discussion at all; they draw correctly more or less, with more or less feeling for the naturalness of form, but they do not use it as a positive element of expression. The form of Gainsborough is floating, imprecise, non-existent; that of Sir Joshua Reynolds is some considerable distance on the road towards the Rembrandt ideal of solidity, but is vague in surface and contour. Hogarth gives us a natural easy addition to the other elements of his picture; Turner an unusual and swift penetration

to the essentials of landscape form and movement, which essentials he contents himself by reproducing textually. The pre-Raphaelites (with the exception of Dante Gabriel Rossetti, whose drawing is mostly a sentimental succession of nerveless curves subordinated entirely to psychologic or facial expression), fatigue us with a painful and meaningless insistence on every detail which reduces the subject to skilled handicraft. The more modern painters,¹ to a man, are purely painters in oil-paint, content to represent natural objects. They are completed by a crowd of illustrators, who, in pen and ink, or other media, use a more or less conventional and tidy line, practically always void of any third dimensional intention, and otherwise silent. In all that concerns the success of the British School, in matters of both literature and plastic art, to say nothing of music, we must look elsewhere for its causes. We must seek them in richness and variety of imagination, in suggestiveness of the indefinite extent of the universe, in the portrayal of subtle and complex psychological states, in the unsoundable mysteries of a Hamlet, in the rather naïvely violent light and shade of Dickens with his exaggerated and unmeasured appeal to sentimentality, to which control is as unknown as it is to the line of Delacroix. The last British artist² to give us really eloquent form as an inevitable principle of his work was probably Chaucer, still under the immediate influence of France. In such lines as :

In hire is high beaute withouten pride
 Youthe, withouten grenehed or folie ;
 To all hire werkes vertue is hire guide
 Humblesse hath slaien in hire tyrannie :
 She is mirroure of alle curtesie
 Hire herte is veray chambre of holinesse
 Hire hond ministre of freedom for almesse.

¹ Written in 1914.

² But see William Blake.

we have a clearness of vision, a precision of delicately modulated rhythm, a limpidity of expression worthy of a French poet of the same epoch :

Ens (dedans) ou milieu je vis Haïne
 Qui de corrous et d' ataine (de ressentiment)
 Sembloit bien estre moverresse (cause)
 Et correceuse et tencerresse (disputeuse)
 Et plaine de grant cuvertage (trahison)
 Estoit par semblant cele ymage.¹

might have come from the same pen, both as regards directness and clarity of vision, and varied suggestive rhythmic form. Nevertheless in spite of its variety, it is always subservient to marshalling force.

Choose two further examples from later English poetry ; the first from Browning at his best :

Oh ! Lyric Love half angel and half bird
 And all a wonder and a wild desire,—
 Boldest of hearts that ever braved the sun,
 Took sanctuary within the holier blue,
 And sang a kindred soul out to his face,—
 Yet human at the red ripe of the heart,—
 When the first summons from the darkling earth
 Reached thee amid thy chambers, blanched their blue
 And bared them of the glory to drop down,
 To toil for man, to suffer or to die,—
 This is the same voice ; can thy soul know change ?

Here the rhythm is irregular enough but is in no way formal (I would wish to say " Plastic " to preserve the analogy). Browning uses the rhythm to excite the reader (just as Delacroix does the hurrying of his line). Commenced slowly it increases in speed to the word " face," thus helping the

¹ *Roman de la Rose*, 1^{re} partie, par Guillaume de Lorris.

thought to mount: it then hesitates, slows and descends, accompanying the meaning of the words. But the movements are very long and ponderous and above all illustrative, directly representative of the idea, just as the Turner line is representative of the real mountain or pine-tree shape. The end aimed at is illusion. A last quotation from Swinburne, taken at random:

We are not sure of sorrow,
And joy was never sure;
To-day will die to-morrow;
Time stoops to no man's lure,
And love, grown faint and fretful,
With lips but half regretful,
Sighs and with eyes forgetful,
Weeps that no love endures.

A tidy and invariable rhythm chosen once for all, a studied uniformity in which the pseudo-changes repeat themselves at expected intervals, which as a consequence rapidly becomes fatiguing and hypnotic, it is the result of almost unparalleled skill in the craft of execution in use of plane and sandpaper, and, like so many *tours de force*, an uninteresting artificiality lacking even the emotional stimulus of a Victor Hugo or a Browning. So has formal value faded from the ideals of England.

Expressive form seems even to have a disconcerting effect on the English. I have often heard Englishmen say of especially popular French music that it "goes up and down without any reason," by which, of course, is meant that in spite of the omnipresent romantic ideal of to-day, enough of the national spirit of a Josquin des Prés or a Rameau is instinctively preserved, and produces variable rhythms which do not fall into the repeated regularities of German or English work, or the soft recurring undulations of Italy. The romanticism and undulatory form of the Italian Renaissance

painters are what make them beloved of the British painters who find corresponding French work arid and tenuous. If we take into consideration the usually accepted meaning or meanings of the word "form" in English, we might perhaps have rendered slightly better the intention of it, in this chapter, by a double use of the word, and thus speak of the form's form. The arrangement of integral form, of whole lines or surfaces becomes composition; form is a continuous quality of the parts of composition, that which remains eloquent in the broken fragment of a Greek statue too small to show composition. But this is not all. The quality of the relations can be extended to the larger relations that constitute the composition. These will be treated in the following chapter.

To drawing must be applied the same or similar canons of criticism as those applied to sculpture. The management, of volumes, planes, and constructive facts, must be as valid in the one case as the other. This may be said to constitute the grammar of form.

A complete analysis of the grammar of eloquent form would take me too far into technical regions which lie without the limits of this book, and would demand very special study on the readers' part. Few subjects are more difficult of understanding than art; yet almost everyone seems to think himself capable of passing judgment on the excellence of a work. Fifteen or twenty years' study is necessary before one can begin to have an equitable outlook on all art manifestations; fifteen years at least of drawing or modelling of the human form (always, after all, the chief object of artistic representation) are needed in order to accustom one's eye to estimate unerringly the essentials of its representation; and to decide at once between the value of a hurried Rodin drawing and the ignorance that can approach so nearly to it. In fifteen years of application one can penetrate far into

the mysteries of such a subject as Mathematics or Physics; yet on such matters the profane never utter an opinion. It is only on the two specially abstruse subjects of the governing of states and the making of works of art that ignorance feels itself licensed to pronounce.

XX

COMPOSITION

As I advance from chapter to chapter, the artificiality of a classified separation of the elements of artistic expression becomes more and more evident. One is obliged to speak of light and shade when treating of form, and composition is intimately allied to, or rather made up of, all the elements other than itself, which compose a picture. But as analysis is separation, we must continue to separate, though we do it in an arbitrary and unsatisfactory way.

Just as colour and form are found to be, with light and shade, also either objective and general, or subjective and particular, so compositions, which are after all made up of these, may be classed in the same way. As a rule subjective composition aims at concentrating and centralising the spectator's attention on a point in the canvas ; it is a convergent and not a divergent influence. This is the main reason why sculpture is ill adapted to the transmission of subjective emotionalism. Although the perfection of the silhouette of a statue must be attained by way of technical consideration of volume and plane, it is nevertheless in the silhouette that lies the chief claim to the spectators' attention ; in other words, the interest is a peripheral one. An interest thus distributed over a circumference may be easily understood to be better adapted to the transmission of universal ideas than one which is concentrated to a single point ;

which, in consequence, has every tendency to identify itself with introspection, or with scientific analysis. To this essential difference between painting and sculpture I have already drawn attention in the opening page of the chapter on Drawing. It remains now to examine somewhat more closely the technical means and methods of composition.

Of Greek painting, beyond the vases, and the Greco-Latin and decadent frescoes of Pompeii, we have no example, but it is easy to form a fairly correct idea of its nature. First we must remember that its object was always what we call a decorative one, it was probably applied almost always to the covering or rendering interesting bare wall-spaces ; and even the rare easel picture undoubtedly partook of the same nature. Now in mural decoration the artist should always strive to hit a just mean between the plastic relief of his subject and the preservation of the surface, of the fact of the wall. I unhesitatingly condemn in this case all extended perspective views of deliberate hollowings out of the surface ; they are errors in appropriateness. Decoration that makes an integral part of an architectural whole, should be subservient to it and should not contradict its mechanical necessities. Drawing should then be measured and restrained in the display of its power. The solidity of form should be ably suggested rather than fully executed. It is especially in this that the vault of the Sistine Chapel fails to be wholly convincing, wholly beautiful. As a marvellously powerful, individual painter's conception it is, if we accepted the romantic and unmeasured standpoint, an unparalleled success. On the other hand as a decoration, it is confused and bewildering. No subjective and psychologic artist can be a great decorator ; for to be a decorator demands a sort of mind totally opposed to the one which concentrates its interest, analyses and examines ; one which follows the precept of the " heaven-sent *γνώθι σεαυτόν.*" A wall appears

to us as a surface ; all of the parts of it are of fairly equivalent importance ; over this surface the thought must be distributed ; the mind movement must be juxtapositional, not fluidly rhythmic, and tending towards a compositional focus.¹

This distribution of the thought is attained in drawing by a certain measured tendency towards flattening, a kind of bas-relief quality in the work ; in colour by a very measured and constrained use of gradation, which may indeed be almost entirely absent without causing prejudice to the work ; and lastly by the nature of the composition. This last quality seems to be peculiarly difficult of attainment to modern minds, if we may judge from the rare, most rare occasions on which the difficulty is even partially surmounted. The different groups or objects of a mural decoration must be joined together by certain unities of intention, by certain arabesques of form ; yet, on the other hand, the eye must not be too violently and directly solicited towards any one point ; it must be allowed to wander and yet at the same time it must be delicately conducted and controlled ; the matter is subtle of execution. Puvis de Chavannes seems almost alone among the moderns in distributive success ; both into and over the surface of the wall. His distances hardly vary in colour from the foregrounds ; they thus remain suggested rather than actual ; his drawing does not aim at exaggerated relief ; though the masses are solidly rendered ; elaborate foreshortening is carefully avoided.

The groups are generally presented in planes parallel to that of the picture, like a succession of bas-reliefs or side-scenes in a theatre. This method keeps the flatness of the wall continually before the spectator, and thus neutralises the hollowing tendency of the modern naturalistic perspective. However, the placing of this series of bas-reliefs is not carried out at hazard over the wall surface, and although each

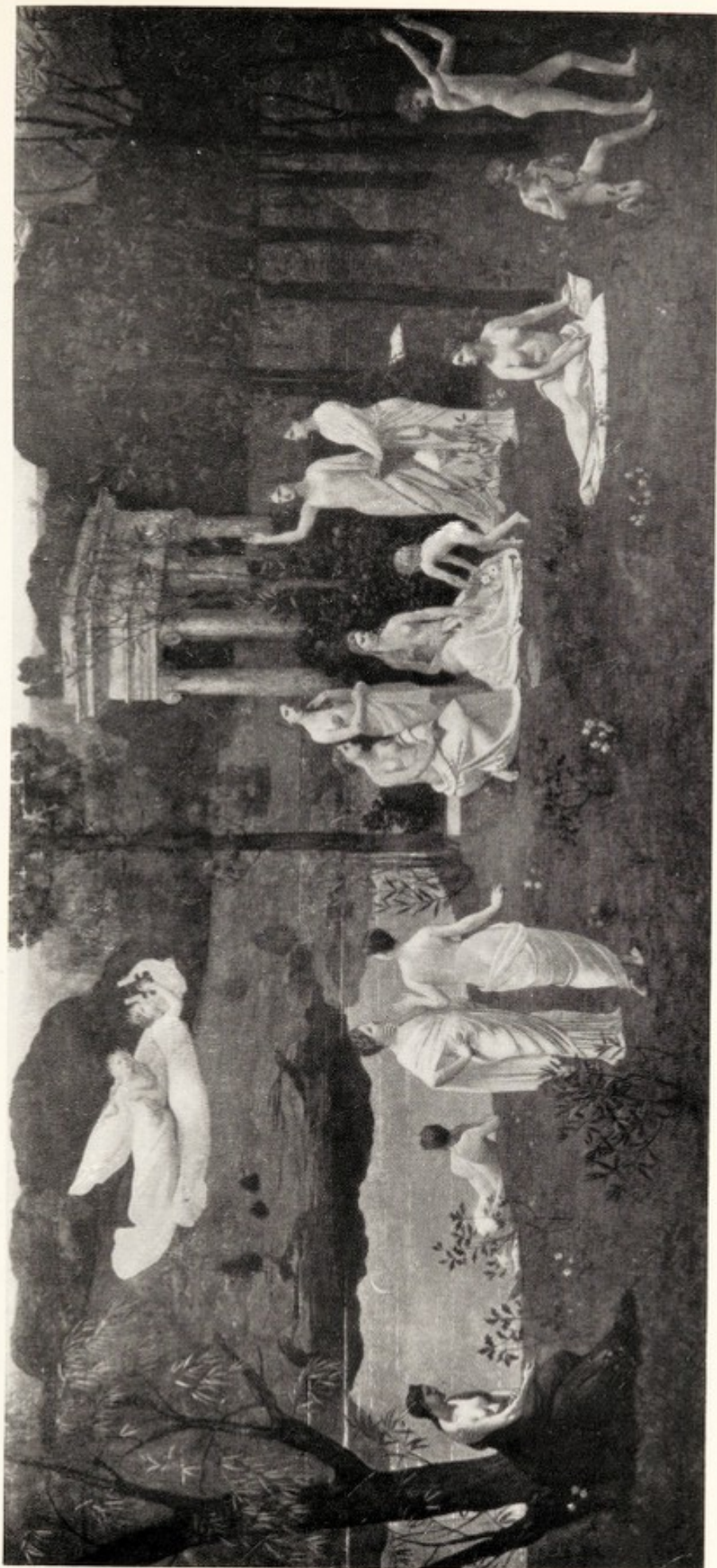
¹ See p. 98.

group is, as a rule, internally almost complete in interest and motive, it is nevertheless subtly subordinated to the main interest, both dramatically and plastically. The flattish colour areas produce a general equilibrium. The principal lines of the poses are not without certain connections with, and continuations in the other groups. Thus the eye, while finding a sufficient interest in each group to justify its lingering, is at the same time aided from one to the other, and in any order,¹ over the whole surface of the wall. Another link between such painting and its architectural surroundings is the liberal use of vertical and horizontal straight lines, which give an intense feeling of stability to the subject, but are saved from a sense of the mechanical by the necessary variety of curve and obliquity that the figures forcibly introduce. At the same time each figure is firmly established in equilibrium, for in mural decoration instability is almost as meretricious as it is in sculpture, and it is only in the late frescoes of Michael-Angelo and Raphael that we find the Italians derogating from this plastic principle.

There is a close connection between the formal element in composition (of which mention was made in the last chapter) and suitability for decoration. The easel picture is largely a product of the Northern Schools; of Holland especially; of informal Venice, who, after Bellini, found her regal expression in Giorgione, Titian, and Tintoretto, masters who were the reverse of formal; last, of equally emotional Spain. Spain learnt from Venice, Venice from Holland.

As usual Italy, or more particularly Florence, offers us a crafty intermediary in the easel pictures of her painters, of whom one might cite the best known: Botticelli. Here a perspective depth, probably unthought of by the Greeks, is allied to an equality of lighting that would not be amiss in the most ambitious wall decorations. On the other hand

¹ See p. 98.



LE BOIS SACRÉ. PUVION DE CHAVANNES

Shows the separated groups of figures in a decorative composition spread over a wall surface. Also shows use of different compositional planes parallel to the surface of the wall. All this maintains the 'fact' of the wall's existence continually before the spectator. A similar 'flattening' is to be seen in the 'Dame à la Licorne' (facing p. 244)



one is met by a persistent ideal of centrally balanced arrangement, that is avoided even in that most frank of French easel painters, Le Poussin. This point of difference between the two schools may be well studied in the exquisite series of Fouquet illuminations at Chantilly, which offer almost as many examples of eccentric equilibrium as their number itself. They may be compared with almost any cinque-cento Italian arrangement, whether it be one of the innumerable crucifixions or Madonnas centrally placed, and flanked by laterally repeated saints, or some more ambitious composition less easily divisible into two sides and a centre.¹ To have recourse to an obvious equilibrium is to deprive oneself at one blow of half the possibility of plastic expression by means of new, unexpected, original—but not simply ingenious—equilibrium, itself no mean factor in purely plastic expression. In some kinds of work destined to architectural ends a centralised equilibrium is obligatory, for example in the pediments of the Parthenon. Here, however, it should be remembered that the pediment group of sculpture is not a thing apart destined to be seen alone, in which case its triangular arrangement would certainly be annoying. It is merely an addition, an added grace, to an architectural equilibrium already existing; in which it plays its part of completion.

This of course raises the point of why a centrally balanced composition should be admirably eloquent in architectural forms, and somewhat reprehensible in pictorial and sculptural ones. The question is a delicate one. I think the only explanation can be found in that curious inverse ratio which seems to exist between richness of means and lofty, far-reaching objectivity of expression. Indeed the more subjective an architectural composition becomes, the less we find

¹ Though there be many examples of unevenly balanced composition among the Italian masterpieces.

the principle of symmetric equilibrium adhered to. In Greek work the law may be said to be inviolable, unless we count such modifications as the natural shape of the Acropolis or other site rendered necessary. But Gothic building, to a large extent subjective, is by no means so firmly attached to symmetry; the twin-spires of churches are frequently of different heights; also important side porches and other asymmetric details might be advanced.¹ In Italy such buildings as the Palazzo Vecchio of Florence scorn all symmetry. Such asymmetric buildings, I believe I am right in saying, are inferior in the sense of stability they engender. Even the mass of the Palazzo Vecchio, stable though it undoubtedly is, might have been made to appear more so with such magnificent material at the architect's disposal. In French Gothic church architecture stability is not a principal object, it is only achieved to the degree that is necessary to all good building; on the contrary an ascensional aspiring movement is suggested, an upward growth of line in direct opposition to the stable horizontality of Greece. It was doubtless a keen sense of the respective fitness of symmetric composition to stable architecture, and of asymmetric arrangement to more mobile figure work, that led the Greeks to employ the two methods in the way they did, thus giving us another eloquent example of their marvellous judgment in plastic things, a judgment beside which all other European (and most Asiatic) ones appear, at least at times, to be uncertain and hesitating. The Hellenes, as has often been remarked, always displayed a most remarkable mastery in the difficult task of uniting variety with symmetry, so that the needs of both were equally fulfilled.

In the examples hitherto indicated it is quite easy to distinguish between asymmetric and symmetric composition, but the thoughtful reader has probably already foreseen an

¹ Romanesque is continually eccentric in its details,



LES BERGERS D'ARCADIE. LE POUSSIN

A most unusual and daring composition. The diagonal of the old man's torso and of the tree trunk is buttressed by the three figures, and crossed by the line running up the front figure's shin continued overhead by the nearly vertical sky limit. Note straightness of shadow on torso. This composition is primarily composed of straight lines; the curves are of very secondary and merely agreeable importance

apparent contradiction. The Rembrandt (?) drawing reproduced facing page 256 is certainly an asymmetric composition. It has at the same time been classed as subjective work ; but the asymmetric arrangement of certain French painting has, at least tacitly, been placed in a more objective light. Moreover, on looking rapidly over the realm of romantic and subjective art, the arrangement found to be adopted is seen to be always asymmetric. Our theory is thus in its present form not completely compatible with the facts, and we are led to observe that asymmetry in romantic or light and shade art is *not productive of the same results as when it is used in formal art*. This is not surprising when we remember that the two kinds of asymmetry are really two : in formal art the asymmetry is established and completed in tangible solid fact ; on the other hand in subjective emotional art part of the equilibrium is always constituted by variety of lighting. In the intermediate case of such an artist as Le Poussin, the light and shade distribution only plays a secondary part ; it is an added element ; the equilibrium is complete on the linear arrangement. In, for example, the daring composition of the Duke of Devonshire's *Les Bergers d'Arcadie* the light and shade, although of a very pronounced quality, may be suppressed without any wrong being done to the equilibrium established, in so unusual a way, among the three standing figures and the seated one in the foreground, and aided by the end of the fragment of architectural work and the inclined tree trunks. If, however, we try to suppress the cast shadows of the Rembrandt drawing, especially the one lying along the foreground, or if we suppress the brilliant light surrounding the disappearing angel, the equilibrium exists no longer.

We thus seem to be at liberty to state : That an asymmetric or eccentric composition, when made up of entirely solid and tangible elements, is an objective means of expres-

sion, and is closely allied in nature to objective expression by means of the form—surface or line—itself ; further : that as the composition becomes less asymmetric and more central, still, however, counting uniquely on tangible elements for its existence, it becomes by degrees less objective and more emotional and subjective ; this we have seen especially in the Florentine cinque-centists. Lastly, when parts of the composition are constituted by light effect, the objective value of asymmetry disappears as we should expect, indeed in this case asymmetry appears to be almost a *sine qua non* ; nothing is more displeasing than a romantic light and shade scheme carefully arranged around the exact centre of the canvas ; the asymmetry may, as in the case of some Turners, be centralised about a nearly central sun, but one can hardly imagine as artistically eloquent some of the Italian Madonna and Saint arrangements if they were fitted out with a central light and surrounding shade.

In the above rough examination no real difference has been observed between architectural, sculptural, and pictorial composition. There is, however, one marked divergence between the kind of problem attacked by the first two, and the one that the last of the three classes of plastic art tries to solve. Architecture and sculpture are unframed, they are obliged to contain internally all the necessary elements of stability and limitation of the considered field. On the other hand, as well as providing a definite limit, the rectangular (or at least geometrical—oval or circular) lines of the frame endow all canvases with a certain amount of ready-made stability. Anyone who has had the framing of pictures to do cannot help having remarked to what extent suitable or unsuitable proportions and tints of the framing accessories may enhance or destroy the eloquence of a painting. I think it unquestionably more difficult, precisely on account of this added difficulty of internal stability, to compose architecture

and sculpture than painting. If we have any doubt on this point, a visit to an exhibition of modern sculpture will prove enlightening—practically all the work shown is composed on pictorial principles, the poses would pass muster, would at once take a higher plastic position were they surrounded by the rigid lines of a frame. Although truly great architectural composition is without doubt the rarest artistic effort, yet mediocre, or even more than mediocre success is more easily attained in this matter of stability in architecture than in sculpture, by reason of the very nature of the material employed in the former art. Merely rectangular blocks of stone possess a suggestion of stability not necessarily inherent in the flexible human body; and the simplest hut, built on rule of thumb principles, may be fraught with a sense of stability which can rival that of a great statue. Not that inept architects do not succeed sometimes in depriving their materials, to a most extraordinary extent, of the stability that is natural to them.

As we have seen, the sense of perfect stability in sculpture is due: first, to the arrangement and equilibrium of the masses; and secondly, to the degree of preoccupation on the part of the artist in vertical lines either expressed or felt. Any Greek statue—if we except, and even then not entirely, such work as the *Niobe* and *Laocöon* groups—will offer instances of both the felt and expressed vertical line or tendency. When the verticality is not actually existing, but only expressed by resultant relations, its presence or absence is more easily detected by comparison than by isolated study. The *Theseus* contains no absolutely vertical lines; but the moment we compare it with *Le Penseur* we at once feel that every set of relations of the former reduces itself to a total relation of what we must call a vertical nature for want of a better expression. The mass of the thorax and the two arms of the *Theseus*, seen from the

normal point of view especially, make up a kind of low truncated cone, whose resultant weight seems to act in a most vertical and central way on the imaginary horizontal plane passing through the elbows. The portions of the figure lying between this plane and the knees again seem perfect in equilibrium about a point at the base of the trunk ; one is almost tempted to mark a photograph of this figure with vertical arrow-headed lines after the manner of text-books on mechanics, so evident are the distributions of the weights, centres of gravity and points of support. Turning to *Le Penseur* the eye full of Greek balance, we at once feel its absence. Possibly the pose is as a matter of fact stable, but at any rate we are far from being convinced of it ; one has an uncomfortable feeling that the whole figure is about to tumble forward, there is absolutely no verticality either actual or suggested. Indeed so unhappy is the figure in this respect that the sculptor has been obliged to patch up his conception by means of a large uninteresting mass of rock, that extends behind and below the figure, in order to establish even the commonly necessary quantity of balance, thereby tacitly admitting the weakness of the whole. The figure is in marked contrast in this respect with the somewhat similar Roman *Pugillatore* of the *Museo Nazionale*. The rock in this case is of course modern, but at any rate it is quite small, and is not called upon, as that of *Le Penseur*, to play an active part in the composition. Yet the *Pugillatore* is far from the apices of Greek art. It is especially in such equilibria of relations that lies the greater beauty of the *Theseus*. This question is treated both in the chapter on Beauty, and in that on Sculpture. To call attention to it again here will perhaps be sufficient without multiplying examples.

When the composition is that of a picture, the shapes enclosed between the sides of the frame and the contours of



LA DAME À LA LICORNE. (Musée de Cluny)

A curious pellucid simplicity is disengaged from the whole, in spite of the complexity of the subordinated detail. Note the masterly equilibrium obtained by decentralizing the Lady, making the Unicorn larger than the Lion whose mass importance is cleverly increased by that of the kneeling figure. Note also the fine curve of the small foreground animals continued behind the figures



the masses, in the picture, enter largely into the scheme of plastic equilibrium. On account of the verticality or horizontality of the frame lines, the frame already possesses a certain stability, which allows of a lesser suggestion of it in the more central masses. All the same a picture is never improved by a diminution of its stable elements. Even such a subjective and romantic artist as J.-F. Millet keenly felt the importance of them, and, in spite of certain other plastic shortcomings, one can never find fault, in one of his paintings, with the stability of arrangement either of the whole canvas or of the individual figures. It is above all this stability that is wanting in the works of his inferior imitators.

The contours of the various masses of a picture constitute especially important elements of pictorial composition, on account of the tendency of the eye to follow lines; hence the doctrine of so-called "leading lines" of which inferior composers make an abuse. Such abuse is the cause of thinness and instability. Leading lines should result in a secondary way from just equilibrium of mass, much as good *chiaro-oscuro* in sculpture results from good mass arrangement, and is only considered by inferior artists; in great work it takes care of itself.

It is impossible to examine in detail all the manifold parts of such a subject. The ways of enhancing an appearance of lightness and elegance by means of cunning opposition of more ponderous mass, and the creation of a particular relation between them, must be mentioned and passed by. Light and shade which is with difficulty separable as a subject from composition is treated elsewhere. An attempt at anything like a classification of different forms of pictorial and other artistic arrangement would easily absorb a volume. I may, however, call attention to one peculiarity of Chinese composition, on account of the way in which arrangement is made to play a part usually reserved in Europe to light and

shade or to envelopment. We are used to either an absolute declaration of facts, such as primitive painters made us, in which the subjective element, if present, is expressed by the nature of facial expression, or by gesture and pose; or to the mysterious envelopment of Turner, or of Rembrandt, or their followers. But Chinese painting seeks to be at the same time both definite and psychologically subjective. The required dreamlike element is very skilfully introduced by means of interruptions in the composition sequence. A kind of doubt is thus introduced, an unreal factor comes into play, the subjectivity of time, even that of space is suggested. The simultaneous presentation of different composition planes, not clearly united one to the other, render the mind position less objective.

Composition as an element of plastic expression is naturally capable of being so modified as to express all possible forms of plastic thought, or rather of being an indefinite number of plastic thoughts; for a plastic thought has been defined as the clothing of a general idea in a plastic form, or as a plastic arrangement whose form is a direct product of the personality.

Composition can thus be simple and open in nature, like that of the tapestry *La Dame à la Licorne*, in the Cluny Museum, or complex and involved like those of Tintoretto. The number of objects or personages represented in a composition has nothing to do with its complexity. Some of the Fouquet arrangements are crowded with figures which at the same time are so wisely ordered as to give a general impression of simplicity, clarity, and unity of intention to the whole. It is practically impossible to do more than point out the existence of the quality of clearness of uninterrupted logical sequence in composition. One cannot satisfactorily define in what exact details of each picture lies a quality which is, after all, an integral part of the whole. The



THE DANCE. FRESCO BY ANTONIO POLLAIUOLO. (Florence)

Shows complex feeling of composition engendered by irregular shapes. Should be compared with La Dame à la Licorne (facing p. 244), a composition highly simple in spite of all the subordinated additional detail. The evident straight line plays but little part in 'The Dance', though many hidden straight lines, on which the principal points of the figures lie, may be traced across the whole group



completely open and sensitive receptive personality will easily distinguish between the various degrees of clearness or confusion expressed by different examples of composition. Two good examples to juxtapose might be found in the *Dame à la Licorne* and the fresco of the *Dance* by Pollaiuolo; the greater complexity of the latter will at once be evident though each is far from being an extreme example of simplicity or complexity, as the case may be. Undoubtedly the more broken shapes of the enclosed spaces in the Pollaiuolo are the chief cause of the sensation of complexity, which this composition gives us, in spite of the undraped nudes and uneventful background; also the contorted poses, the limbs thrown this way and that, are contradictory to unified intention. *La Dame à la Licorne* may be taken as an excellent example of subordination of multitudinous detail to the main simple massing and arabesque of the composition, which in almost all the panels is very masterly.

Reference should be made to the latter half of the chapter on Plastic Logic, where several points connected with composition have been discussed already. It is useless to repeat the discussion here.

XXI

LIGHT AND SHADE

CHIARO-OSCURO or Light and Shade may be defined as the use of distribution over the chosen surface (or the object in the case of architecture or sculpture) of shadow and of light, in some such way that they become factors in the means of transmitting artistic thought. The *effect* of light or rather, one should say, the illusion of light in painting or shaded drawing is obtained by a more or less conscious study, and subsequent reproduction or modification of what are technically known as *values*. But a *suggestion* of light may be arrived at by much more subtle means quite devoid of value opposition.

As usual we find the word "values" employed, even by adepts in the management of them, in a loose and vaguely limited way; one artist extends the province of its meaning farther than another; one associates it more closely, and another less so, with colour. Before examining some of the questions relating to the particular use of light and shade, I will make an attempt to expose a short and definite account of the meaning of the word "values" and its practical limitations.

The expression *tone* (and *ton* in France) is often employed by painters, but in such a hopelessly confused and varying way that I have given up all hopes of running a clearly defined meaning of it to earth; so variously is it applied

now to colour difference, now to shade. It will be noticed that I have almost entirely avoided its use in this book ; it only introduces an unnecessary element of confusion, more especially as the same ground is entirely covered by the more easily defined terms: colour and value, and by the results obtained by combinations of them. Such vague phrases as " the general tone of a picture " I prefer to turn into " the key of colour " or " the key of values " as the case may be.

The impressions we receive from natural objects are of a double kind ; we receive an impression of colour from an object, or from part of an object, and at the same time one of a *quantity* of light, either transmitted or reflected as the case may be. *The study of the relations of the various quantities of light, with which the artist deals, is called the study of values.*

It is at once evident that a direct transcription of values from nature is impossible except in a few very special cases—if even then it be. Light itself does not find a place on the painter's palette ; the nearest approach to it is white ; but this white varies in value according to the amount of light in the room in which it is seen. Again, black in shadow is obviously darker than palette black fully lighted ; and black and white are the two extremes in paint. Not only are these two extremes inferior in respective intensity to the extreme intensities of the natural scale, but their intensities vary according to the lighting conditions to which the picture is submitted.

Purely mathematical considerations would lead us to think that the only solution of the difficulty would be found in some such system as the following. Let us suppose the sun itself to be represented by the number 100, and darkness by 0. The possibilities of a normally lighted palette might possibly range from say 10 to 20. If now we wish to transcribe a natural value coming in intensity half-way between

the light of the sun itself and complete darkness, and consequently represented by 50, we should choose 15 on our scale as intermediate between 10 and 20. However, art is not mathematics, and the artist's resources in the matter of suggestive relations far surpass those of the mathematician or of the physicist. Also we have tacitly assumed in the above reasoning that the end of art is uniquely the generation of illusion ; which it certainly is not.

In painting in colour, a colour difference will often replace a value one ; a purple, of the same value as a yellow, will often satisfactorily play the part of a shadow to the latter. Even the decorative position of a note on the canvas will influence its efficiency in the luminous scheme. Thus the idea of the value relation, or of the key of values, is merged into the idea of the general relation that constitutes the total picture.

The arrangement of values, or the composition of values, is called *chiaro-oscuro*, when it is directly representative of marked light and shadow ; or decorative arrangement of lights and darks when it is less or not at all so.

Between these two extremes, at which may be placed a Rembrandt and a Greek vase respectively, stretches the entire domain of pictorial expression, and even of pure outline drawing. In the last case the intensity of darkness or lightness of the line is by no means a negligible factor in the expression of the æsthetic relations created. A pencil drawing in pure line on white paper is, in one sense, a decorative arrangement of certain thin darks, of a certain intensity, on a white ground. Change the intensity of these darks and the æsthetic effect will not be precisely the same. We are still in presence of a problem in values.

In colour work the question of values fades insensibly into that of tint. Yellowest yellow, reddest red, and bluest blue, have value intensities inherent in their nature ; I have indicated them in increasing order of darkness. The

spectrum as viewed in an ordinary spectroscope is a gradated series of values as well as one of colour.

To a certain extent we can establish our key of values before beginning a picture ; but according to the technique employed, we shall find ourselves obliged to bring certain, perhaps unexpected, modifications to it in the course of completing the artistic validity of our series of relations : a darker accent here, a lighter note there, may be needed to give life and rhythmic intention to what would otherwise remain cold, calculated, and inexpressive.

The relative estimation of values is not always an easy matter, especially when the field of study is a natural landscape. A light object immediately surrounded by darks will appear, by contrast, to be lighter than another surrounded by light ; when the contrary is really the case. Several aids to value estimation are employed in practice. One is the successive presentation of a small object, such as a cork or even the thumb held vertically, before the different areas to be compared. By taking care that the cork receive the same quantity of light in each case, a constant value is established with which, in turn, the others under examination may be compared. By such experiment we are often surprised to find that a white object, such as a road, which appeared lighter than the sky, is perhaps in reality darker, the cork appearing darker against the latter than against the former.

Another system is to eliminate the dazzling quality by reducing the quantity of light received from the objects. This may be done roughly by nearly closing the eyes, or, in a more exact way, by the use of the black mirror. However, both these systems reduce and modify the key of colour, so I myself prefer to close one eye and throw the other completely out of focus by means of the muscles of accommodation.

By this means one sees the whole scene blurred and

indefinitely, though the vividness of the colour is undiminished. Objects thus losing their particular signification, do not solicit our attention, and we are able to receive an integral co-ordinated impression of the whole, in which it is much easier for the judgment to make observations concerning the relations established between both the colour and the values of widely separated parts of the subject.

Before entering more fully into the examination of light and shade, it may be necessary to define the meaning of a term which has already been used more than once in these pages. I allude to the technical word *envelopment*. It is in relation to our present subject that the word finds its greatest employment, though it is also applied both to colour and to form. I must beg my philosophical readers not to see in it any philosophical intention. It is used here as purely as possible as a term belonging to practical art execution. *Envelopment means the sacrifice of sharp division between two tints, forms, or values, and the insistence on the merging of one into the other with a resulting "soft" effect.* In painting, Eugène Carrière pushed envelopment to excess. It is completely absent from Greek vase painting, and practically entirely so from early Italian frescoes. The art of Turner is also an enveloped one. In painting or modelling from nature we can either exaggerate the natural envelopment, or almost entirely suppress it, according to our end in view. We can either entirely fail to show the position of the limiting profile of certain planes, say on the shadow side of a figure, by letting them fade by imperceptible degrees of colour and of value into the background tint, thus "enveloping" our form; or we may insist on the absolute material boundaries, usually by means of a conventional line. The tendency to observe similarity between contiguous values leads towards envelopment; the tendency to observe small value differences leads towards absolute limitation. It should be re-

marked that I have said the tendency to *observe* similarity between contiguous values leads towards envelopment, and not that the tendency to *use* a similarity of value does so. We may paint a decorative picture utilising almost identical values and depending only on our outline and colour differences to establish our relations. Such a picture would be without passages from the figure to the background, and thus without that kind of envelopment.

It might, however, possess another kind of envelopment—that of the outline. In this case the term envelopment may be taken as practically synonymous with the expression “emotional rhythm of line.” When one curved line meets another in a clearly defined point, forming a cusp or an intersection, there is no envelopment; but when one of the indicated form movements passes by indefinable degrees into the other, there is envelopment. The less clearly the limits of the forms are defined—along the direction of the line—the more the line is said to be enveloped. This must not, however, be confused with the arbitrary simplification and synthesis of form displayed in a vase drawing; in such drawings the line is as a rule remarkably free from envelopment. I am inclined to think that a complete suppression of linear envelopment of natural forms is impossible; it would probably lead inevitably to an angular shock of geometrical lines deprived of all the suppleness of life.

The third or sculptural envelopment is, of course, really identical with the last; it lies in the modulation of the transition from plane to plane. It may be used to excess, as in some of Rodin's work; it may be sparingly indulged in, as in most Greek sculpture; it may be alternately suppressed and used, as in some of the supple surfaces of Egyptian statues, in contrast with sudden and determined changes of form direction. In Greek sculpture envelopment is usually replaced by very careful adjustment of small plane against

small plane. Whether this also should be styled envelopment remains a moot point.

Having thus called attention to a few main questions concerning what might almost be called the material of light and shade expression, we will now go on to consider some of the innumerable ways in which artistically valid relations may be produced by the use of this material.

Of all methods, the least adapted to clear formalised suggestion, and the best fitted to vague representation of complex ill-defined "soul states" is *chiaro-oscuro*. As carried by Rembrandt to its culminating point it may be roughly defined as: A method of concentrating attention on positive light by surrounding it with negative darkness; a necessity accompanying this concentration is a particularising of the work, it becomes of individual rather than of general import. However, from the excessive use of centralised light and shade, as Rembrandt practised it, there may be traced a constantly decreasing employment through Velasquez, Titian, Claude, the impressionists, the Florentine fresco painters to its complete absence in Egyptian decorations, or such work as the illuminations of the middle age. The frescoes of Italy are in this, as in many other things, almost an epitome of its development. Only just enough shadow is employed by Giotto to allow a slight modelling of the form, though this little is more than the Greek vase painter felt to be necessary. When we arrive at the romanticism of the Sistine Chapel, light, shade and mystery play an almost equal part with that of drawing in the total expression, though Michael-Angelo with the instinct of the decorator, that at least in part he was, distributes his lights and his darks evenly over the surface instead of relying, like the easel painter Rembrandt, on a single concentration. One might almost term the famous vault the turning-point

in the history of *chiaro-oscuro*. In some motives the system of detaching dark figures on a light ground is used ; in, for example, David vanquishing Goliath. In others the figures are lighted and detach themselves from the dark background, as in the greater part of *Noah's Drunkenness*. They make a pattern of white on black, really more akin to an opposition of white and black used decoratively, than to a real scheme of light and shade, which demands more indefinite intermediate tones and veiled passages for the full expression of the mystery natural to it. The value relations in full *chiaro-oscuro* work are multitudinous, or rather infinite, tone passes into tone by imperceptible gradations ; nature itself is imitated in the infinity of her combinations, not suggested by an artificial arrangement of a few relations, voluntarily placed in a certain way to produce certain rhythms and accords which are *suggestive* of the nature of natural objects.

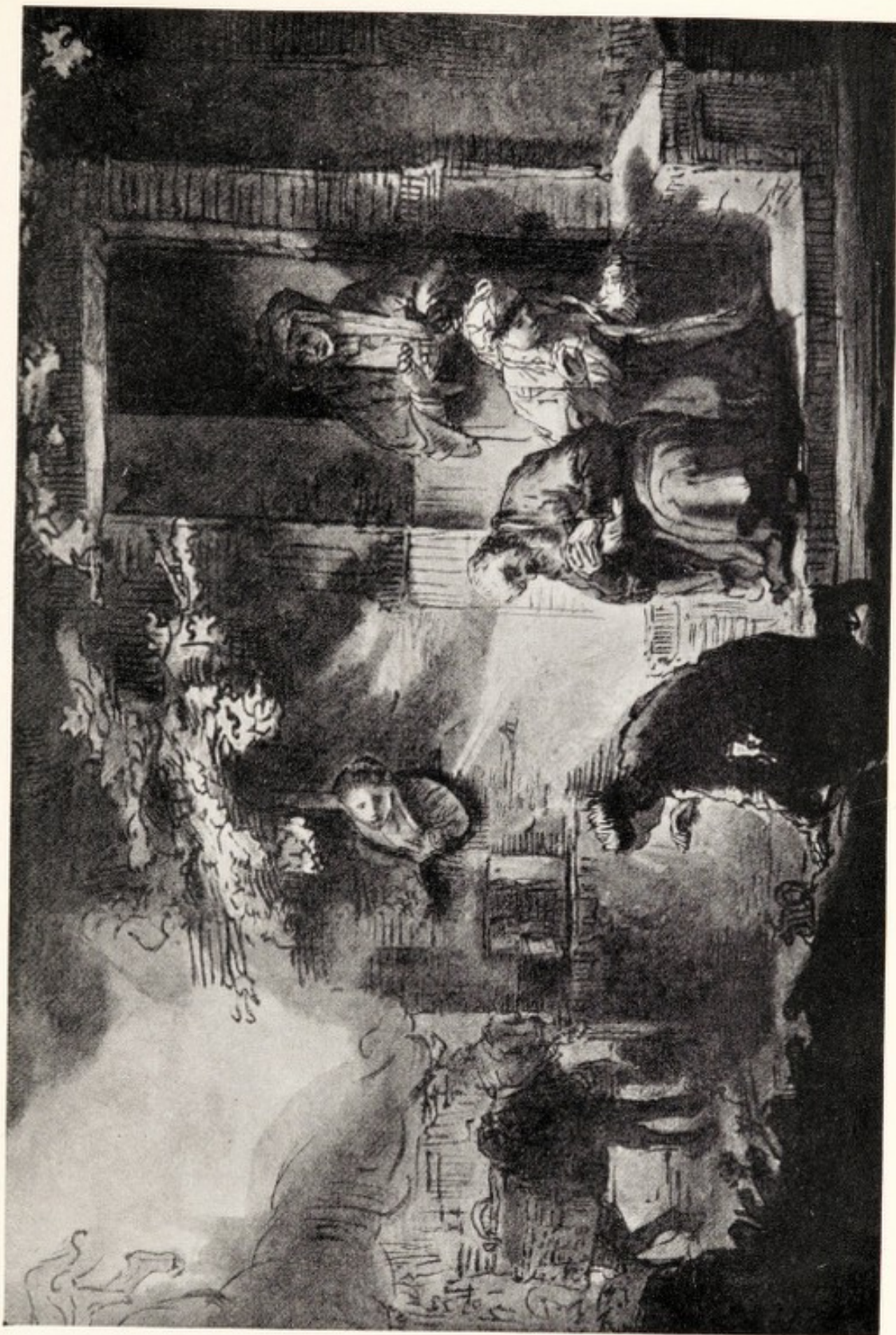
Light and shade, as every other means of expression, may all the same be used to express very different things. It is never the means employed that establishes the nature of the work. This nature is always the immediate product of the artist's spirit ; though, of course, an absolute unhesitating personality will naturally and instinctively choose some clear and direct technique, leaving those essentially undecided, as light and shade, to the use of more vague and romantic temperaments. However, such directly simple statements are all too directly simple to fully coincide with facts, for we must take into consideration the element of fashion in art. Poussin was, as a thinker, of a definite class ; but living as he did shortly after the decline of the Italian Renaissance, when Michael-Angelo, Tintoretto and Titian had firmly established emotional methods, he was obliged to make liberal use of light and shade. His technique was imposed on him by his period. Let us examine for a moment the differences between his use of light and shade and the use to which

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one of its true apostles, Rembrandt, puts it. I choose at hazard, two examples: one the "Bacchanalian Dance" by Poussin in the National Gallery; the other a pen and wash drawing entitled *The Angel Raphael leaves Tobias*;¹ it is, I believe, in the Albertina at Vienna. One thing immediately strikes us on comparing the two works, namely: that in the first case, the light and shade is, so to speak, an addition to the idea of the picture, while in the second it is the fundamental factor of the arrangement. The simplest expression of the arrangement of the Poussin is a rough division of the canvas into four quarters, of which three, composed of the ground—two—and the trees—one—are dark, while the remaining quarter, the sky, is light. Over the two lower dark quarters runs a charming, and almost bas-relief tracery of figures evenly lighted. From the exigencies of the position of the light source, one side of every figure is dark, the other light, and there is moreover a certain number of cast shadows. It is important to remark that this arrangement comes naturally, so to say, from the fact that the group of figures is lit from the left and from in front; but that one feels that this lighting is almost accidental, and that it has no influence on the real existence of the group, which might have been lit from another direction without losing one iota of its rhythmic and linear balance, its sculptural self-contained quality. The light effect is here a purely extraneous addition,² and Poussin obtains his pictorial contrasts by

¹ Possibly not by Rembrandt himself. But this does not invalidate the argument.

² The whole is a homogeneous work; consequently all its parts integrate. Thus the shadow of the torso of the central male figure continues, admirably, the line of the inclined tree trunks (which is prolonged, by the satyr's arm, down to the right bottom corner of the frame). This integration is due to the excellence of the formal conception and grouping; just as the light and shade of the Elgin Marbles is always masterly from whatever side they be lit. The point has already been treated, p. 165.



ANGEL LEAVES TOBIAS. REMBRANDT (?). (Vienna)

Example of a composition in which light and shade plays a preponderant part, in contrast with La Bacchanale of Poussin (facing p. 258). However, the Rembrandt drawing fulfils certain sculptural necessities essential to all great painting

masses of colour ; for example, in differentiating the flesh colour of the girls from that of the men. Turning now to the Rembrandt drawing we find quite another state of things. Here the light and the shadow play pre-eminent parts, without them the picture ceases to exist. The four principal figures are arranged in an arc of a circle whose centre is the brilliant light in the top left-hand corner ; that is indeed the fundamental idea of the drawing. Suppress the light and this arrangement ceases to have a *raison d'être*. The grouping of the figures possesses no statuesque qualities, no rhythmic tracery of limbs is apparent, the poses are closed and massed to the greatest possible extent, in order the better to play their parts of producing areas of light and other areas of shade. The kneeling figure in the foreground is neither more nor less than a curved shadow mass, and is even questionably necessary. On covering it with the finger I am inclined to think that the composition is improved and rendered more stable. Another important point to notice is : that in front of this kneeling figure, and running towards the donkey, is a curved edge of shadow intended to retain the eye and lead it back to the picture instead of allowing it to wander uselessly into the corner of the frame. Poussin, in the right-hand corner of his picture, was met by a similar necessity, but, instead of utilising the chance result of lighting, he brings us back by means of the actually existing forms of the reclining woman and of her drapery. His composition depends uniquely on actually existing objects. This pre-occupation of the real existence of things is discoverable throughout the canvas, the contours of the figures are carefully preserved in spite of the light effect, and as a general rule the dark sides of the figures are detached against a light part of the background ; or if the background is uniformly dark, the figure, like that of the girl, behind the satyr of the right-hand group, is kept as light as possible.

By this means clear and undoubted relations are established, which suggest sharp and unhesitating passage from thought to thought and ordered logical sequence of ideas. In the Rembrandt, on the other hand, the shadow and half-tone sides of the figures fade by undecided degrees into the enveloping shade of surrounding objects; and the group in the doorway is so arranged as to generate but one mingled shadow mass, which is the thing aimed at, the essential element of the composition. Each figure of the Poussin has its own arrangement of light and shade, separate from that of the other figures, although, of course, it is caused by the same lighting and subordinated in certain ways to the whole effect. The unity of the composition is primarily attained by the interlacing arabesques of the drawings. In this way the sense of form is kept predominant, with all its necessary following of suggestion of order and precision. In the Rembrandt the solidity of mass and its resultant projected shadow, or its lighted surface alone count; graciousness and clarity of profile is eschewed, for an openness of pose would vitiate the breadth of simplicity of the shadow masses, and tend to spread the spectator's attention over the surface of the canvas, instead of concentrating it into the depths of the picture, as is necessary to express the subjective, analytic, emotional mind condition of the northern Dutch artist.

It may be objected that the back line of the kneeling foreground figure is detached in as sharp and absolute a contrast on the light ground as is ever the shadow side of one of the Poussin figures against the lightness of the sky. To establish clearly the nevertheless very real difference between the two examples is not easy, and belongs really to three different divisions of our subject. Such plastic "statements," as these two pictures, are made up not only of light and shade elements, but also of those of drawing and of composition. Though the two latter are more fully treated each in its



BACCHANALIAN DANCE. LE POUSSIN. (National Gallery)

Example of a composition in which light and shade only plays a secondary instead of a primal part as in Rembrandt. The solid and existing forms, even if deprived of the concomitant chiaroscuro, would constitute the composition. It shows again a masterly use of the straight line, the basis of all great occidental work

proper place, I am obliged to pay some little attention to them in the present analysis. The main difference between the conception of this figure and one of Poussin's is of course in its particular placing in the composition as a sombre and uninteresting obstacle over which the spectator laboriously passes, before beginning to penetrate into the picture. Such a figure plays much the same *rôle* as the complex foregrounds of Turner, in suggesting the indefinite extent, and detail, of a universe perceived by an analytic mind. By one of those seeming paradoxes of which art is full, the greater complication of the arabesque of the Poussin suggests a greater simplicity of thought than do the simplified closed poses of the Rembrandt; because it is not so much the immediately evident facts that are active in suggesting thought as the relations resulting from these facts,¹ which in the case of the Poussin are to a large extent clear and sharp, while in that of the Rembrandt they are doubtful, floating, and confusedly complicated. The relation between the kind of drawing and the nature of the composition in each picture has great influence on the suggestion of the form of thought; but drawing and composition are treated in their proper chapters. At the same time we must never forget that divisions of an integral thing, such as a picture, into different classes of components is purely artificial, and false, and unless continually controlled, will inevitably lead us into error. The picture is integral, the impression we receive from it is also integral, the differentiation that we make, in order to study the generation of the one by the other, is artificial and consequently inexact in its nature. It is impossible satisfactorily to divide the territory of light and shade from that of composition, and that of drawing

¹ Which may of course be reduced in turn to other relations; see Chap. III. The difference here established between facts and relations is made for the sake of simplicity.

from those of the other two. What indeed is the essential difference between a Rembrandt canvas and a Greek vase painting? When both are seen from a distance, both are recognised to reduce themselves to mere arrangements of light colour and dark colour. Yet one is light and shade, and the other is not: the first gives an immediate illusion of a light effect, the second but subtly suggests, one knows not how, an ambience of brilliant sun, one feels instinctively that such clearness of intention is only possible in the land unfurnished with mysterious obscurity of half-light and lightless shade. Yet the exact point at which, in the comparative study of art, such oppositions cease to be light and shade, and become the shadowless arrangements of the Greek vase, is impossible to determine. When we consider two such extreme examples the difference is evident. The successful gradations, to which Ruskin attached the whole secret of light effects, are paramount in the Rembrandt and absent (or almost so) in the vase. But what shall we say before the *Inferno* of Signorelli at Orvieto? The figures are individually modelled in light and shade, they even cast shadows; yet the light and shade arrangement plays a less part again in the whole than it did just now in the Poussin. From Signorelli it is but a step forward to the highly elaborated chiaro-oscuro expression of Leonardo, or that of the Sistine Chapel, and but one backward to the flat tone Byzantine ideal of the earlier painters.

The light and shade element may almost be said to have disappeared from the Aretine frescoes of Piero della Francesca, and its place to be taken by the exact contrasts due to clearly marked areas of different colour or value.¹ It would seem that the primary difference between the two forms of

¹ As I write my eye catches a framed reproduction of a Pinturicchio fresco. A most *savant* use of light and shade as a means of suggesting relief and concentrating attention is already in evidence.

contrast lies in the graded nature of the light and shade transitions on the one hand, and in the clearly and sharply defined one of the Greek vase or early fresco type on the other. As a secondary result, the complex passages of light and shade suggest the directly complicated and detailed indefinite universe, and thus stamp themselves as products of a *perceptive* mind and art, rather than of those of a *conceptive* art whose juxtapositions are more arbitrary and clear set. This consideration of the nature of the juxtaposition takes us at once into a consideration of the quality of the limiting contour ; but for the study of this point the reader must be referred to the chapter on Drawing. Nor is the movement of the gradation over the surface, or the absence of such movement, the only difference between the two artistic manifestations under examination. There is also the difference between the arrangement or placing of the various light or dark patches on the surface ; but this again enters into the territory of composition. It only remains here to study a few of the qualities and restrictions of the technical use of the light and shade element, though in so doing the confines of composition will be anew and continually traversed.

XXII

DIFFERENT USES OF LIGHT AND SHADE

I AM inclined to think that we really only speak of light and shade as such when it is deliberately used to lead the attention to, and concentrate the attention on a certain point. Of this, as of all other artistic terms, an exact definition is both wanting and difficult to make.

Strictly speaking the terms *chiaro-oscuro*, *clair-obscur*, or light and shade should only be applied to a deliberate use of an arrangement of shadow and of light as a *primary* means of artistic expression, while the simple use of a shadow side to objects as a means of giving them relief should not be included in the same technical category. It is obviously impossible, however, to draw a hard and fast line between the two. The artist who indulges, like Le Poussin, in a dark shadow-side to his figures is obliged to consider to some degree the resulting arrangement of dark patches on his canvas. To what exact extent this arrangement is the necessary result of the grouping and poses, as pointed out above, and to what extent there is deliberate arrangement of the shadows is a question difficult and almost impossible, if not indeed useless, to decide. As soon as a painter begins to use shadow in his work, there is evidently a beginning of thought expression by its means; but such purism in the use of terms would after all rather destroy than aid our arbitrary classification. It is better to look on Poussin as a moderate

chiaro-oscuro, and on Signorelli, in spite of his shadow-sides, cast shadows and deliberate arrangement of dark patches in the groups, as not being a chiaro-oscuro at all. Such an artificial separation evidently cannot be upheld against argument; for, the gradation in shadow use being continuous, there is no real reason why the division should be placed on one side rather than on the other of either of the two artists in question. As a matter of fact in the frescoes of Orvieto there is no concentration of the observer's attention by means of light and shade; the eye wanders freely over the wall-space, except in so much as it is solicited by dramatic movement, line-tendency, and grouping of figures. It is perhaps on this question of concentration by means of shade or light that the separation of class is really based. In the previous chapter we noticed the bas-relief character of the composition in Le Poussin's "Bacchanalian Dance," and the resulting even distribution of interest over the canvas. Nevertheless the light drapery and flesh of the woman reclining in the right-hand side of the picture exert a distinctly attractive force on the eye; we are in presence of the beginning of the light concentrations of Rembrandt.

It is always light that attracts the eye. Although attention may be centred on a dark mass in a purely flat and decorative arrangement, I believe it impossible to attract the eye to a main shadow mass and away from light; we instinctively seek positive visible existence of things, and flee negative obscurity. The successful pictures containing a dark centre of interest are few. One might quote the celebrated "Norham Castle" of Turner, but this is only an apparent exception to the rule; the eye is really attracted not by the dark mass of the Castle, but by the sun behind it, though in seeking the latter we are obliged to see the former. It is also the violence of the contrast between the extreme light and the extreme

dark that holds attention, it requires an effort to study the dark reflection in the water below ; for it is both far from the attracting light, and is scarcely in contrast with the surrounding tones.

Light and shade need not be of that violent kind that the mind of Rembrandt delighted in, and found fitted to an expression of itself. The delicate differences of value of shadow and light that we find in the late Turner water-colour, although differing quantitatively from the Rembrandt formula, still belong to the class of painting which undertakes direct representation of light effect, as distinguished from those other artistic efforts that, consciously or unconsciously, do not aim at such immediate representation, at such copying of effect. A Greek vase, an early Italian fresco give us a sensation of light on account of the peculiar choice of their relations, but neither of them aims at a choice of such relations as shall give the *illusion* of real light. The spirit of the later Turner water-colours is largely, if not entirely, based on movements of light and shade. Only, by imperceptible degrees he lightened the shadows, filled them with wonderful colour and reflected light ; until the means of expression seems to be one of colour contrast, as indeed it is in one sense. But in art we must always carefully distinguish between superficial resemblance and fundamental intention ; by two different routes artists often arrive at results which, to the careless observer, appear to be almost identical. The reason, the cause of Turner's colour contrast is a light and shade one ; the cause of colour contrast in an Italian fresco is an unconscious desire to express a certain mental state by the completely intentional juxtaposition of a certain orange and a certain blue. If this juxtaposition give us in a vague way the sense of light, it is due to the fact that the colour idea in question is one that can only come to a brain that delights in and is, so to speak, imbued with light. Such a

mind will obviously choose certain more or less complementary colour relations, which cause a certain optical irritation analogous to that produced by bright light. But this choice must not be looked on as deliberate (though in some cases it may be) ; the ideas are those which naturally come to such a brain.

Why attach so much importance to this distinction between direct light illusion, and indirect suggestion or feeling of light ? It is by reflected light that we are aware of plastic art, both as painting and as sculpture ; for though the actual tangible existence of the latter may be caressed by the skilful hand of a trained sculptor, it would be absurd to maintain that such a means of appreciating it could for a moment vie with the ocular one. It is by the arrangement of colour and of values that such works of art primarily appeal to us. The causes of these arrangements are then of first importance to our classification. The artist who places dark tones in certain positions relatively to certain light tones, with the unique idea of making those light tones appear luminous, is obviously not of the same class as the Japanese print artist or Greek vase painter who places his darks and lights with a view to producing an abstract rhythm of related colour and value areas. The first painter may be merely a clever worker, whose ideal is simply to produce luminous canvases, void of intention ; or he may, like Rembrandt and Turner (not to change our examples), rise to the level of genius *and use his produced light effect as a kind of secondary language*, as the real method (or rather one of several) of the transmission of his thought. The luminosity (or effect) that results from a colour or value juxtaposition by Turner is a far more important factor in his message than is the actual relation established between the two tones, which was only established with a view to producing the

effect. Quite otherwise inspired is the juxtaposition of the synthetic objective artist, who makes less emotional call on our memories of the appearance of nature, and a greater one on our apprehension of the thought-expressive power of rhythmic arrangement. As usual the tracing of sharply defined boundaries is impossible, for in the later work of Turner (if not indeed in all, though it is more evident in the later) there is a marked tendency to use the merely decorative placing, as would a Chinese painter, of the dark accent of a Venetian gondola, or of some exaggerated figure note. Nevertheless, in the Turner, the open evenness of a Chinese conception is always sacrificed to the concentrating movements of colour, and of light and shade, its dominating cause.

The use or non-use of light and shade practically affords a means of distinguishing between romantic, subjective, indefinite art, and its contrary, the synthetic and objective; for light and shade is essentially a vague and multiple means of expression, unless it be reduced to such a schematic condition as to become merely suggestive, instead of imitative of nature. I cannot conceive an objective, unemotional art making any important use of light and shade. Puvis de Chavannes, as his work became wider and more general in import, gradually suppressed the use of shadows; he only retained those strictly necessary for the modelling of the form. At the same time his lighting became broader and of less concentrated source, which is after all only another way of saying the same thing.

All sculpture is, of course, seen by its light and shade; which is the only way¹ in which we ocularly appreciate

¹ It is not, I think, necessary to enter into the question of binocular vision here. Though an unquestionable factor in the estimation of solid form by the artist, it does not appear to play a marked *rôle* as an element of communication of artistic ideas. See, however, p. 203.

solidity, though the mainly eloquent part of a statue: its profile, is not dependent on shadow and on light for its perception. As is pointed out in the chapter on Sculpture, the light and shade, though always light and shade, is of two kinds: that deliberately considered, sought after and based on more or less violent contrast, such as that of Rodin; and that which is only a necessary concomitant of rhythmically arranged form, arranged without a moment's consideration of the chiaro-oscuro relations which would result from it. The same differences may be traced here as between the two schools of painting. The objective Greek work is composed of broad planes almost all in full light; and it is only in the century of Pheidias, the century of Socrates, that we begin to find the slight menace of overhanging torsoes such as that of the Illyssos. Not that I believe for a moment that Pheidias deliberately conceived and counted on the effect of shadow masses, his mind seems to me to have been far too formally plastic to have done so. We only feel the possibility, as yet unachieved, of the introduction of more human, more subjective, more emotional aims into art. Further, I am certain that at that time the use of shadow as an artistic factor was not yet dreamt of.

As a rule, it is hardly necessary to state, light and shade takes the form of a framing of the former by the latter, of a concentrating, a shutting in of the positive and visible by the negative and invisible; but we must observe a difference in the mental action in this case, and in the case of a statue. The sculptor's mind, as has been already remarked, is in a sense convergent, but convergent only as far as a periphery, for there is no actual centre to the visible surface of a statue. The interest is peripheral, that is, extended; thus the result of sculpture is divergent and extensional. Although at first view sculpture would seem to be more concentrated than painting, as it deals only with, perhaps, one figure and no

background, the contrary is really true—that is in the case of most modern easel-paintings ; the apparently larger extent of the canvas only serves as a field for the exercise of converging tendencies. The shadow framing may be very marked and carried out between extremes of light and dark as in most Rembrandts, or be of a more subtle kind as, for example, in a Teniers, or again be so delicate in nuance of gradation as to give the impression of a uniformly lighted room, where a very careful examination is needed to trace the gradations from the frame to the lighter centre of interest.

It should be noticed that the centre of plastic interest to which the eye is ultimately led need not be the dramatic centre ; as we have seen in the case of Watteau's *Embarquement pour Cythère*, where the greater part of the dramatic interest lies in the first and second groups on the right-hand side, while the plastic centre is far away in the distance over the sea. Rembrandt generally makes the dramatic and plastic centres coincide ; this is practically an obligation for a portrait painter. In the drawing reproduced, in spite of the light round the disappearing angel, and in spite of the inviting light beyond the donkey, the eye is irresistibly drawn to the old man's head—again a coincidence of plastic and dramatic centres. Turner and Claude, by means of their light, invite us into the far distance of the picture. Both Rembrandt and Poussin keep us in the foreground by the distribution of *their* light, but they do it for different reasons and by different methods. The first concentrates our attention on one single point of the foreground to which he invites special examination ; the second, by equally spread lighting, uses the whole of his arabesque design as an almost equally intense medium of thought transmission. Claude uses his arrangement of light and dark in a more measured way than Turner. Claude's conception of it is more stable, more

intentional in itself than is that of Turner, which aims above all at emotional suggestion of light, air and distance, the great obvious facts of landscape. The failure of Turner to rise beyond mere vague emotion to abstract expression is well exemplified in the two canvases placed, by his wish, with the Claudes in the National Gallery. The measured distribution of light and shade in the Claudes, filled with a majestic reserve, makes the eagerness of Turner to display unlimited detail knowledge seem poor. The distribution of Claude is fraught with plastic meaning; that of Turner is simply subservient to the exigencies of distance and of light. It is by this indirect success in their rendering that he claims our approbation, by the emotions that rise within us when we are confronted with such wonderful semblance of dramatic moments of natural landscape. My sensations before a Turner are the same as those that I have in presence of some specially magnificent natural effect.

Light and shade is solely an element of the art which attains its end by way of imitation of natural effect. It may be forced in contrast as in a Rembrandt; moderate and restrained as in most of Velasquez; delicate as in Turner; evenly distributed as in many Dutch painters of interiors. It may be used, as may every means of expression, with reticence and masterly refinement; or, as in Whistler's case, it may seek delicacy and only achieve flimsiness of expression. It generally takes the form of shadows circumambient to light which is intended to attract the attention. It may, however, be used in an almost completely decorative way as in the Signorelli frescoes. Clearly defined shadow shapes, especially cast ones, may be utilised as parts of the whole scheme of contrasted areas of differing colour and value. In this last case it practically ceases to be what we understand by light and shade expression; it merely serves the purpose

of aiding relief. The differences of colour and value which result from this shadowed aiding of relief fall into rank with those other and similar colour and value differences inherent in the representation, say, of light flesh and dark drapery equally lit.

XXIII

COLOUR

COLOUR is the most flexible of our expressive means. Form must remain within certain limits of natural possibility (unless geometrical decoration be included, and then even more rigid rules enter into play). Light and shade must be graduated in such a way as to give a verisimilitude to the effect, otherwise the would-be shadows are nothing but smears of dirt. But colour adapts itself to every usage, to every kind of expression. Combined with clearly arrested form, it may be abstract and universal; it may take up every character from the general to the most floating impression of ultra-particular emotionalism; and in each case it may vary from scarcely more than a monochrome to the most gorgeous or vivid oppositions of the palette.

At best colour would seem to be a more sensuous, voluptuous medium of expression than form; it would even seem to be more physiological in its action. To stretch somewhat fantastically the idea, we may remember that even micro-organisms are sensitive to different coloured lights. Putting aside the fact that executed colour ideas cannot escape from a certain admixture of elements of position, one feels that even the most successful colour expression, unsustained by at least adequate form, remains to a certain degree unconvincing. From its very sensuousness the colour language is far easier to read than that of form; hundreds appreciate the colour of a picture for one who will critically examine its

formal expression. In colour execution it is less necessary to have a clear, fixed notion of the work to be done; accidents of the palette are often powerful auxiliaries to feeble artistic intention; and there is unquestionably greater licence in variety of combination, than there is within the more restrained limits of form. On the other hand colour is undoubtedly capable of rendering the mental position of very delicate sensibilities—for example, in silvered fusion of scheme; while in its clearer, brighter manifestations it may become an aesthetic element worthy of comparison, as such, with expressive form; though it seems to me that it never attains the positive integral assurance of the latter.

To what extent colour and form may mutually complete one another, to what extent expression may be pushed to its utmost in each, are points very difficult to decide. It would seem that concessions are required on either side. Whenever a high degree of colour expression is attained, perfection of form is slightly neglected and *vice versa*.

What an exceedingly subtle and evanescent thing is colour. Who shall explain, for instance, where lies that feeling of *whiteness*¹ that has always been associated with France, and which finds its emblem in the Royal Standard and the *Fleur-de-lis*? It is as impossible to decide what is the cause of the silvering of French things as it is to trace the origin of the prevailing sense of yellow in Italy. May it not be that the generalised colour harmonies of a country give rise to an abstract colour idea—a colour idea whose import is more or less similar to the idea of a harmony in yellow or in white,

¹ Rabelais treats of this "whiteness" with preposterous pun; C'est la cause pourquoi Galli, ce sont les Francoys, ainsi appelez parceque blancs sont naturellement comme laict, que les Grecz nomment γάλα, volontiers portent plumes blanches sus leurs bonnetz: car par nature ils sont joyeux, candides, gratieux et bien amez, et pour leur symbole et enseigne ont la fleur plus que nulle autre blanche, c'est le lys. Gargantua, liv. i, chap. x.

as the case may be, without, however, any real separate existence of the tint whose idea one feels? In England there is a dominant sense of rich greens; the argent note of France is wanting. Again Egypt is associated with palest rose. But it is useless to continue such fragile themes.

It will be best, perhaps, to begin by examining those manifestations of colour which have been met with most frequently in more recent times, that is, those which aim at reproducing the harmonies of nature. These harmonies are always in a certain key, there is always one dominating quality which permeates all the tints—this must not be taken to mean that any given colour is mixed with every tint, though indeed such may be the case. In a Turner we may find an indivisible gradation of colour from a speck of pure yellow to a touch of purest cobalt blue. However, the whole key of the picture is a seizable, nameable one, or rather would be if our vocabulary were sufficiently rich in words. This is what nature herself does. There is infinite transition from the line of intense gold bordering a western cloud and the exquisite blue that veils the valley's growing mystery. Representation of this integral flux of colour must necessarily belong to the school of suggestion of the indefinite complexity of nature. There is less difference in intention between such a scheme executed in almost a gray monochrome, and one executed in the ultimate possibilities of cadmium, cobalt and madder, than is generally supposed. This becomes evident when we remember that men, who are really masters of their palette, work in very different schemes of colour. Examples stretching from the most delicate of grays to the greatest possible brilliance of tint may be found among the water-colours of Turner, or in the canvases of Monet. Great difference between colourists lies, of course, primarily in the mental position of the artist; but in so much as the actual technique is concerned, it lies more in the way

in which the colour is used, than in the tints chosen. The arrangement of mere black and white on a Greek vase may be instinct with gaiety, the gorgeous chromography of a Turner fraught with indefinite sadness and sombre fatality, while the bright tones of Monet's palette may express the *inconscient* sentimentalism and sensation of a moment. Envelopment and merging of tint into tint bring necessarily with them some of that quality which is the *sine qua non* of chiaro-oscuro indefiniteness, of insoluble psychological mystery. Sharp distinction and intransitional shock of colour, whether brilliant or sober, correspond with more definite and absolute philosophies. The nature of the relations is in the first case of a flowing natural kind, suggesting indefinite series of things. In the second the relations are so established as to make a definite statement, determine a fixed and abstract parallel, more or less free from a sense of imitative portraiture of the natural colour relations.

We are in the habit of associating light with gladness, and darkness with sorrow. These alliances are neither final nor all-embracing. I have often received impressions of intense gravity from landscapes oppressed by the insupportable splendour of a tropic sun. The intense light of Egypt gave birth to the most sombre art the world has seen. However, in consulting my memory of impressions received from pictures, I think that, without exception, gaiety of feeling has been accompanied either by a deliberate representation of light in later times, or in earlier ones by a subtle suggestion of it. By light I do not mean chiaro-oscuro effect but a flooding and even light, free, as far as possible, from counter-acting shadow.

The representation of light depends on a proper adjustment of relations of value and of colour. They must be composed by a personality penetrated and convinced by the *fact* of the light. Under these circumstances a simple outline

may be imbued with such a transmitting suggesting sense. We have already studied the question of proportional values in the chapter on Light and Shade. It is unnecessary to go over the same ground again ; but though we saw the possibility of establishing at will either a large or narrow range of values, we did not consider the question of the application of a long or short range of colour to these schemes. So this remains to be done.

As a general rule the more powerful and more violent the chiaro-oscuro, the less we shall feel the necessity of employing brilliant colour. Rembrandt contented himself with the simplest of palettes : Yellow Ochre, Black, Burnt and Raw Sienna, and Light Red form the basis of the extraordinary naturalness of most of his painting. In contrast with the excessive warmth of his shadows, simple black and white attains such a bluish tinge, as to render the use of real blue unnecessary. And here we touch the fundamental essential of artistic colour, one which is understood by so few painters, namely : That every tint in a picture must be made to appear of a colour that in reality it is not. This seeming paradox requires explanation. Tints are not seen individually but as relations ; a blue-green, appearing blue in juxtaposition with a yellow (the yellow in turn seeming intensified and to have become luminous), will take on a green hue beside an ultramarine or cobalt blue. The whole secret of the successful use of colour may be reduced to the understanding of the proper way in which to employ these and similar colour relations. Most painters live their lives through without ever understanding the importance of this point. Ignorance of colour relation, that is, of producing an effect by the mutual reaction of two tints neither of which appears to be what it really is, is the reason of the disagreeable brown-paper appearance of the nudes of Burne-Jones. They appear to be cut out and stuck on grounds otherwise agreeable in

colouring. These backgrounds are indeed agreeable in *colouring*; but they are not *colour*. They are conceptions of arrangements of different tints, harmonious in a kind of monochromatic way, that is by absence of daring oppositions, which so long as the artist remains in the unadventurous realm of still-life and decorative landscape, fulfill the needs of the case sufficiently well. But once he attacks the alternate and marvellous distribution of transparency and sheen, of perfectly harmonised form and hue of the nude, he has need of more subtle procedure. The gradations of reds, perhaps dragged over, in the lights, with a gray, that sufficed for unliving drapery, the modelled greens that proved enough for grass and leaves (though even here the hand of the master colourist would betray itself by unexpected oppositions of tint), these direct colour methods are no longer able to deal with the wonderful material that is human flesh. It is at once both transparent and opaque, a monochrome, and a bewilderment of ever changing colour; exaggerate the colour differences, the surface is destroyed, for the tint changes are so intimately allied to those of form that in painting it is impossible to separate them. Elsewhere I have brought Ingres to book for certain failures of primal conception of plastic form, but in justice, I cannot deny him praise for the extraordinary way in which, in the back of *La Baigneuse* in the Louvre, he has intimately combined form (though inexpressive) and colour. The two seem as almost inseparable as in life. The colour passes in rhythmic variation of rose and gray and pale topaz tints over the modelling of the surface; and the two movements of the schemes of form and colour are perfectly co-ordinated. It is at least a triumph of technical skill, for the full appreciation of which one must oneself have striven to follow with a brush the endless interlacing rhythms of the nude. For the rendering of these contradictions, this continuity of form

now verging on the rose, now gold, now blue and silver as the light catches it, the most subtle resources of the palette are needed ; the requisite unity must be attained by the intimate and equal reaction of all the tints ; a yellow must be made to appear more coloured than in truth it is by means of the adjacent gray ; which in turn must seem more blue by reason of that very other tone it strengthens and makes full. Then only does one possess the glow of golden flesh that holds us in admiration before the "Flora" of Titian, the silvered and distinguished beauty that alone Velasquez knew, the astonishing vitality, palpable life, of the nudes of Rubens' "Judgment of Paris." The notes of colour should strike together to make a colour phrase into which the individual nature of each is merged, as that of a musical note is merged into the individuality of the phrase of music. Without such intimate harmony imitative nude painting—as distinguished from nude drawing—is, as it almost always is, meaningless and unconvincing. The nude is the most marvellously delicate and rhythmically governed series of colour relations with which the universe presents us.

But it is not enough to construct a new series of colour relations that shall parallel, however well, the actual series of relations of real colour on the model ; the new series must be an artistically valid one, the relations must be of a far-reaching nature, suggestive of things universal, of the indefinite, or of the infinite. From the point of view of technical criticism I fail to find any defect in the nude of Ingres ; each time I examine it I am anew astonished by the perfection of the colour transitions and of their oneness with the formal conception, and with the chiaro-oscuro. Yet in some way the whole is unsatisfactory. My admiration is the result of a determined effort ; it is a workman's appreciation of good work. The relations chosen by the brain of Ingres, perfectly co-ordinated though they be, are of a silent kind—

they take us no farther than themselves ; rhythm of line, rhythm of colour remain but rhythmic, they open no door towards the infinite. Disdaining to use the facile road of uncontrolled emotional suggestion of the indefinite, the road of a Delacroix, Ingres chose the unquestionably higher one of strong control, of precise expression. But his philosophic outlook, his mental range was incapable of imbuing with intention his technical success. His capacity as an artist exhausted itself in marshalling, in irreproachable order, his technical unities. Was it a failing of the epoch, the nation, or the man ? It is almost impossible to say. The intention of French art has never been of the greatest. Is it that the technical perfection of Ingres surpassed, as a means of expression, the matter to be expressed ? Poussin has said greater things ; and we notice that the technique of Poussin is less polished, is a little more vaguely emotional than that of Ingres. Ingres would have little or none of the lightness, the charm of careless gaiety, so truly French, which inspires the colour alike of Fouquet and of Monet. He aims at perfect sculptural excellence both in form and colour, and, in succeeding, fails. The phrase is too majestic for the thought.

Delacroix was less ambitious—I speak figuratively—he chose imperfection as his means, and succeeded in rendering himself a complete artist. He turbulently expressed, by disjointed and disconnected means, the changing, complex universe ; to this expression he allied one of a romantic conception of blind destiny. Compare for a moment the careless, nervous colour-hatching of the shadows of a canvas by Delacroix, where yellow ochre or raw sienna is struck through the main tint to give transparent richness to the shade. Compare this hurried emotional work with the indivisible perfection of Ingres. The method of Delacroix is that of a brain accustomed to vague and imprecise perception, of vast but dimly perceived ideas. He hurries on from one

incomplete perception to another. It is not in number but in clearness that his ideas are lacking. It is not in richness but in precision and clarity that his colour is not complete, in the nature and in the method of its juxtapositions.

I should almost be inclined to put forward the "Odalisque" by Ingres (Louvre) as a colour epitome of the failures of the French spirit, as a less perfect one of its successes. It is a canvas before which one hesitates between attraction and repulsion. The ivory tones of the flesh in sharp contrast with the blue of the drapery (is it chalky or silvered?) at one moment charm, at another repel. The division is absolute, indeed there is not one atom of doubt or hesitation about the picture. How valid is the absolute plastic conception from a statuesque and formal point of view, may at once be seen by a comparison with its present pendant the "Olympe" of Manet. The latter, when still at the Luxembourg, impressed us with its qualities. In the more august assembly of the Louvre it is especially its defects that strike, so difficult is it to bring an absolute and even judgment to bear on the works of art, so much are we affected by easy immediate comparisons, or by the habit of passing fashion. Ingres has cleverly arranged the colour contrast of the figure with the background in such a way as to maintain the essentials of the picture in evidence, even when it is seen from the remote end of the gallery. Manet, seduced by the desire to study the almost white tones of the nude on the hardly whiter ones of the sheet, has produced a result, which when seen from a distance, gives undue predominance to frontiers between drapery and background, to frontiers that are decoratively meaningless, or almost so; hence the main division between the light and dark portions of the picture is almost void of significant shape. The clarity, the certitude of the Ingres colour arrangement is to a great degree wanting in the Manet.

XXIV

COLOUR—*continued*

BEFORE proceeding further with an examination of individual works, it will be as well to establish a little more definitely the artificial classes into which we divide artistic colour. The harmony between the different fragments of colour may be of many kinds ; which, however, fall into two principal groups corresponding to the division we have already instituted between the two schools of artists. A sentimental and romantic art of the non-general type demands gentle and enveloped transitions from tint to tint ; abrupt passages at clearly defined places, from one colour field to another, are avoided, in order to generate in the observer's mind the same indefinite sense of the immensity of the actual universe, as worked vaguely in the spirit of the artist himself. This kind of colour, by its very indefiniteness, produces a sort of narcotic dreamy effect on the personality, it is directly sensuous, and for that reason, more easily read by nations not possessed of a specially keen plastic sensibility. The glowing colour of Titian, for all its inimitable skill, is scarcely suggestive, it is sensuous, fraught with the feeling and the sound of summer nights, rich with the *faste* of southern artifice. Its appreciation is easy to us—unreining of the senses is all that is wanted to cast us beneath its thrall. The relations established are half willed by the artist, half the product of the chance of a softening, enveloping brush. Those willed are

indeterminate in their nature ; their fluidity of intention allows them to take place, without shock, among their brethren of chance.

Bearing in mind that colour may be either frankly emotional and subjective, or less emotional and objective, or again may hold any intermediate place between the two, we will attempt to simplify a little the confusion that would seem to reign in this particularly elusive branch of plastic expression.

A most instructive exercise in the nature and intention of colour is afforded by a close comparative study of the colour of Le Poussin and that of Titian. The casual wanderer in a gallery might easily, on the strength of a passing glance, class both painters side by side in some ill-defined fraternity of old masters. Yet the two men are in reality widely separated. The purely sensuous glowing colour of Titian, with its indecision of frontier, its seductive transitions, is replaced in the paintings of Poussin by the same greater absoluteness of intention that we noticed in the case of his *chiaro-oscuro*. The unmeasured glow of Titian is replaced by French moderation, a moderation that appears to be only poverty to those incapable of appreciating the compensating gains of the sacrifice. A language is always moulded in the course of its growth by the spirit, by the nature of the ideals of a people. We are then not surprised to find French to be the poorest of the chief modern languages. It is intentionally so. Many possibilities of Latin were suppressed in its conversion into the *langue d'oil*, others were lost in the transition to modern French ; for it is in France that we find preserved some shadow of that ideal of measure that enabled early Greece to mould and to direct the civilization of Europe. Prof. Gilbert Murray, in *The Rise of the Greek Epic*, has a pregnant phrase : " The appreciation of good things and the power to refuse them is characteristic of the spirit of progress."

He adds: "I think most scholars will admit that it is also eminently characteristic of Greek civilization." So far he is beyond criticism, but is he quite right in saying: "The artistic side of man insists upon the need of understanding and appreciating all good and desirable things; the ascetic side insists on the need of a power to resist, a power even to despise and ignore, every one of them, lest they should hinder the world in the attainment of something better"? I will not discuss here the apparent confusion between artistic and moral aims, I have done so elsewhere.¹ I will only wonder whether he is justified in thus splitting up the artistic sense of measure, of restraint, or rather, whether he is justified in restricting the meaning of the word "artistic" almost to an antithesis to "ascetic." Is not the real antithesis that he has in view that between "sensuous" and "ascetic"? Are we not here in touch with the English habit of confusing sensuousness with art? The sensuous colour harmonies on the walls of the National Gallery attract thousands; the Greek vase rooms of the British Museum, with their intellectual, restrained, sharply uncompromising mental manifestation are deserted, and only afford a passage to more picturesque and amusing exhibits. In England Titian will always be a more popular painter than Poussin. But in matters of general judgment we must not allow personal preferences to prevail. We must remember that the appreciation of restraint is just as much an integral part of higher artistic natures, as is the appreciation of desirable things. Perhaps, in so much as it is the source of choice, it constitutes that part of the constructive artistic nature, which differentiates it from the merely sensuous enjoyment of the unproductive observer. It is not improbable that the quantitative measure of such reticence may go hand in hand with the measure of the artist's greatness. Little doubt that this

¹ p. 79 *et seqq.*

was meant by Prof. Murray, who does not intend us to see a real division in his separation of *artistic* and *ascetic*, only one that is supposed, in order to aid literary explanation ; but he has scarcely made the point quite clear.

We have already stated that the conception of colour itself is a thought, a thought transmissible by means of mixed and juxtaposed tints, a thought untranslatable, exactly, into any other medium ; but a thought governed at its birth, moulded in its nature by the formative personality, and, in so much, expressive of it.

A colour intention cannot be quite free from at least one attribute of form : position, for artistically speaking we cannot consider one single tint as existing alone. In the broadest and most general way it only *exists* by its relation to its surroundings, on which its most intimate nature depends. Examine a piece of coloured stuff in a dingy November London street ; transport it to the blazing tropical sunlight of Colombo, and note whether the impressions it gives you are identical, whether it seems, in a word, to be the same. It has already been indicated that in questions of art, of painting or decoration, colour relation will be seen to be everything. Paint a blue sunlit sky, the blue it seems to be to the inexperienced eye ; your finished picture will be cold, unlovely, colourless, lightless. Repaint, this time using a bluish green, which by skilful opposition to yellow tones in the landscape, you force to appear to be the blue of the real sky ; your work will be a luminous, brilliant success.

The colour of the sky is not an absolute thing ; close against a light tone it will appear darker, against a dark warm tone lighter and colder, and so on. Relation is again the important thing. A picture painted in the most sincere spirit of imitation, does not imitate each colour. The artist constructs a colour scheme of which the total relations are somewhat similar to the total relations of the landscape.

This is why two artists of equal value, and working side by side, produce two very different canvases, though they be of equal merit. The same process takes place here as in the case of form. The relations perceived by the artist are modified by his personality ; and, receiving the imprint of his outlook on the universe, are re-dictated in the shape of new colour combinations to his executing hand and eye.

It should be remembered that there exist both artistically valid colour harmonies and harmonies analogous to the sing-song rhythm of a popular song, which for our present purpose we may take as deprived of artistic intention, and as only capable of pleasing a childish uneducated sense by comfortably turned repetitions returning at expected intervals.¹

Again, many well-executed colour schemes are almost inexpressive for some reason or another difficult to determine. As an example I might cite the curious lack of interest to be found in the otherwise brilliant and uncriticisable colour of a " pre-Raphaelite " Millais.

Those colour schemes which we might style artistically valid must now be separated into two groups : that of the emotional and that of the objective and general type.

The kind of idea transmitted by fused harmonious colour is of the romantic, complicated type, it deals with the indefinite ; the relations established are of an imprecise nature, the relations pass, like those of the sensible universe, one into the other in sustained continuity. This very imitation of the natural method prevents the attainment of the expression of abstract qualities that a more arbitrary one permits.

Opposed to this natural method we find the setting of tint sharply against tint, clearly divided one from the other by

¹ Not to be confused with the traditional rhythms of primitive music and art.

established form ; in this way relations of a non-doubting nature and intention may be set up. At the same time one feels that however new, however perfect the relation of tint to tint be, however surprising in its subtlety, its eloquence remains inferior to that of form. Perhaps the Chinese have best succeeded in the marriage of the two kinds of expression ; however their form always seems to remain slightly behind the best Greek in significance, it is frankly subsidiary in some of their colour conceptions.

The important difference for the art critic to seize is that between the mental position that engenders the sensuous colour *abandon* of Titian, or of Turner, and "the enjoyment and the appreciation of the life which"—I quote again Prof. Gilbert Murray—"is too deeply writ on all Greek poetry (he might have said all Greek art) to need any illustration, though one might refer to the curious power and importance in Greek life of two words, *κάλλος* and *σοφία*, beauty and wisdom ; to the intensity of feeling which makes *ἐλπις*, hope, or *τόλμα*, the love of daring, into powers of temptation and terror rather than joy ; to the constant allegorising and transfiguration of those two gods of passion, Dionysos and Erôs."

"Nothing too much," the old Greek rule, was one of which the *verve* of Delacroix, the striving of Turner's colour schemes, towards the painting of the unpaintable sun itself, took no account.

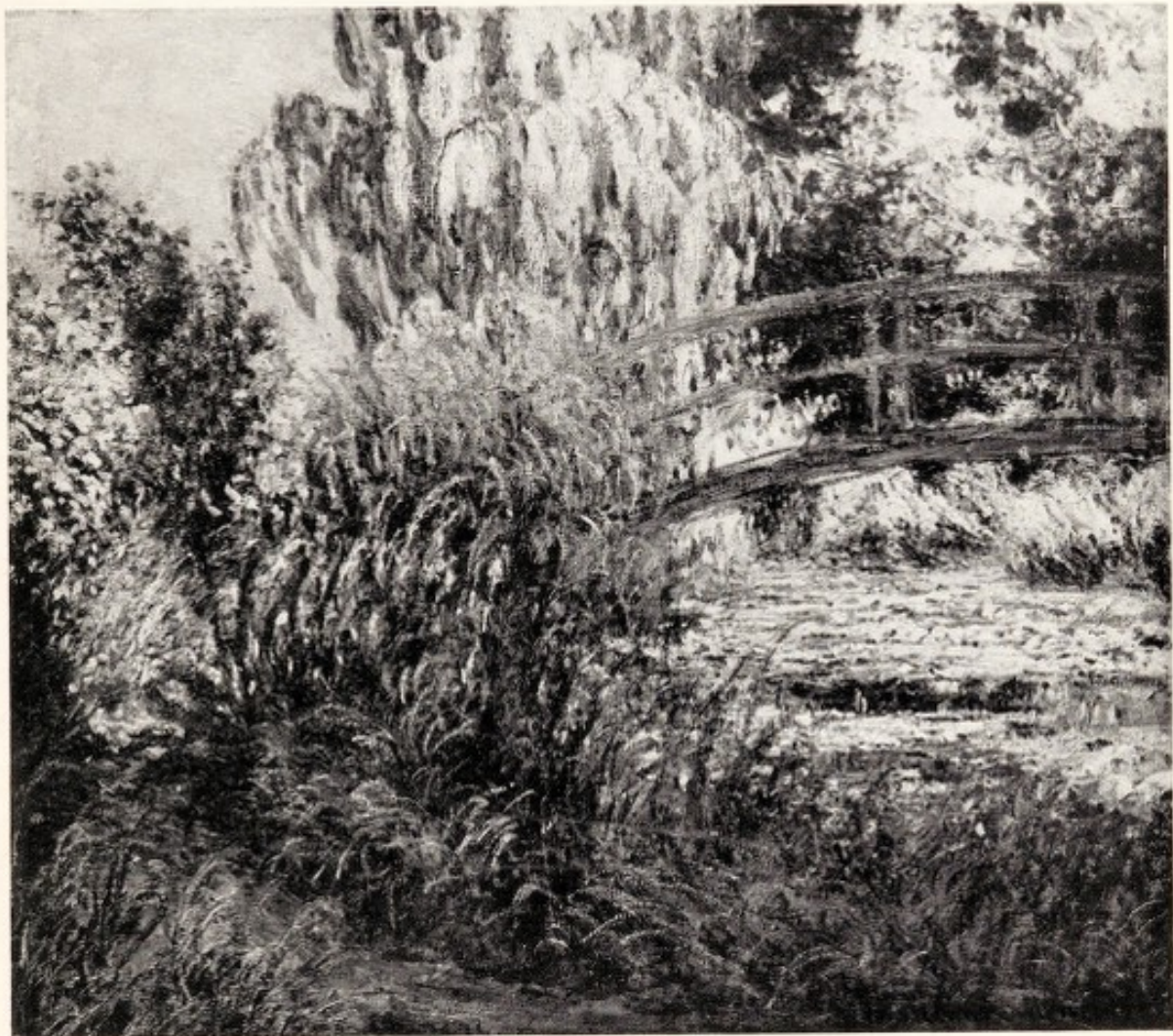
Yet reticence, moderation, measure, must neither be confounded with caution nor with timidity in colour. The timid grays of Whistler are no more moderated, no more measured in the Greek sense, than are the tones of the brilliant palette of Monet ; indeed they are rather less so. It is a question not of the superficial appearance of the tints, but of the meaning of the relations established, of the nature of the inspiring personality. Prof. Murray translates *ἐλπις* simply

as hope. He would perhaps have done better to bring forward more intensely its meaning of suspended waiting (*attente* in French is nearer) of either good or evil nature; for I am inclined to think that it was precisely this indecision of waiting that was least agreeable to the Greek.

Now the colour of Monet is absolute,¹ it is instantaneous, it gives us a clear and single idea. The vague and low tone harmonies of Whistler are suspended in intention, cloudy and indetermined in meaning; in a word, his is an emotional art fraught with unrealised possibilities, half indicated suggestions of openings on the indefinite. Nothing is more ridiculous than to bring together Whistler and the Japanese. He took from them certain hints of arrangements, a certain decorative management of mass—which are, after all, the universal appanage of plastic art—but his painting is none the less throughout in exact contradiction with their objective, hierarchic, definite art. Whistler is in the Ultima Thule of indefinite subjectivism expressed with equal vagueness in form, in *chiaro-oscuro* and in colour. Even in the hints of arrangement that he took from Japan, he has only been able to use such parts of them as are consistent with that illusion of nature, to which he is so closely bound, which is so abhorred in Japan.

The intense momentariness of the colour of the chief impressionists is, of course, detrimental to their complete success as artists. Their colour aims at reproduction of the transient, ever-changing aspect of nature. Their colour relations are constructed so as to be similar in kind to those observable at the given moment in nature. They even glory in the degree to which they have succeeded in eliminating other and more enduring elements of plastic art. It is the

¹ Its arrangement is not so; the divisions *between* the tints are confused, while the divisions *of* the tints are clearly defined. The primary nature of the colour is absolute.



CLAUDE MONET'S *LE BASSIN AUX NYMPHÉAS*. 1900

The deliberate negligence of formal study in this case should be compared with the opposed intention of the Landscape by Cézanne (Plate facing p. 288). Even in the monochrome reproduction, the intense preoccupation of the painter with chromatic representation of transient light effect is evident. The confusion and incompleteness of the technique aid in transmitting the sense of momentary noting

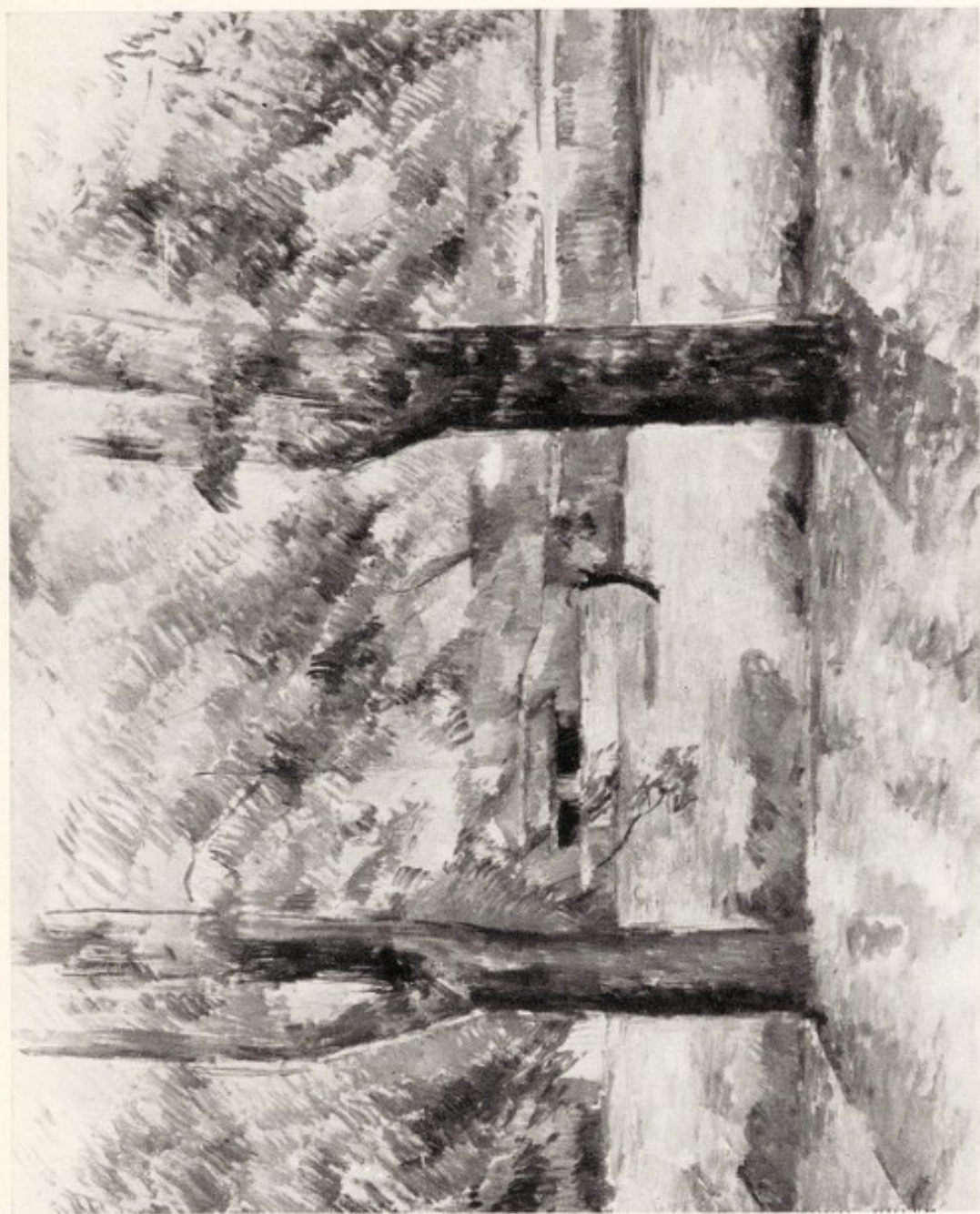
art of pure immediate perception, that is to say, as nearly as it can be, for we can never eliminate from art certain necessary and fundamental conventions. It is here that lies the profound difference between the imitative art of Turner, and that of Monet or of Sisley. The latter artists transcribe unchanged—or almost so—the *arrangement* of the colour relations of the scene. Turner on the contrary profoundly modifies this arrangement. He creates interlacing colour movements which, by the series of relations that they engender, open up mental possibilities of space and time, and vague fatalistic philosophies, entirely unknown to the impressionist transcriptions of blind, uncaring, unheeding nature.

In pictorial art Turner was the most various master of the extent of the palette. By his inimitable and flexible interweaving of colour masses he expresses in a most direct way a Bergsonian continuity or flowing of the universe. Pass over a Turner water-colour of the best periods in whatever direction you will; insensible transitions carry you from shade to shade of colour with unerring ease. It may be that from a pure shadow blue at the border one is carried, unaware, through intervening tints to some vermilion touch of sunset splendour. This continuity is a great factor in the rendering of the sense of fatality that pervades his work. We feel that a sunset by Turner follows a day inevitably, and as inevitably precedes a night, fated in its turn to flee before the dawn. Over and into the paper the eye follows the linked possibilities of shape and colour, and in the mind there grows a confused and overwhelming sense of the indefinite universe, eternally recurrent yet never the same; the hopeless fatalism of Turner holds us in its grasp.

Turner was a masterly draughtsman, but his drawing is silent; and as the years went on it became more and more summary, was more and more hurriedly executed. He drew

continually ; but he drew because he was a great artist, and because he knew that he must have the visible shapes of nature at his beck and call. Form was to Turner a thing to uphold the gorgeous mantle of his dreams ; a surface understood, it is true, in order to be a support worthy of the changing vapourous colour, that seems to move and fade and pass before our eyes, pass guided by a blind and ruthless destiny. No other man has ever drawn a mountain shape with such consummate skill, no other man has clothed it so wonderfully with clinging pines ; but the shapes are silent, subservient to their mistress : Colour.

In strange contrast with this masterly yet ineloquent drawing is the almost painful striving of Cézanne. Here we are in presence of an ideal indeed different. In the rare canvases, for the most part still-lives, in which Cézanne has achieved a full success, the colour is exquisite in its research of delicate precision of tone. But foremost in the idea of Cézanne comes the element of stability. The subtle colour movements of Turner which spoke of the flowing of time, the eternal changeless change, are here replaced by directly applied fragments of colour. The solidity of all objects is insisted on. Everywhere pierce signs of his wish to reduce all natural forms to the stable and simple geometric shapes, the cylinder, the cone, the parallelepiped, everything has a solid enduring base. We feel that no yesterday is behind the canvas of Cézanne, that no to-morrow is before it ; there is only an enduring, established present. Here unquestionably form takes prior place. However, Cézanne reduced to mere form would be but half Cézanne. What remains with us as an indelible memory are the harmonies and delicate intentional placings of notes of blue and of orange, sometimes achieved at the cost of incalculable pains and patience. There is sometimes an afterthought of China in the orange and the blue, though both are silvered by the tone and air of



LANDSCAPE BY PAUL CÉZANNE

Shows the architectural stability that Cézanne always introduced into his work. Note columnar feeling of the tree trunks ; technique of foliage insisting on upper and lower sides of leaf masses ; insistence on modelling of ground and horizontal massiveness of walls

France. The austerity of his mind demands a restricted colour expression. The solidity of the foundations would be imperilled were they decked with the colour reveries of Monet, who, again, as his colour mounts in fantasy of melting tint and shimmering light, forsakes too real and stable form. Yet I have chosen Cézanne because he is a real colourist, and, it may be, the one of all other modern Europeans who has expressed the greatest sense of stability, by means of colour ; though as a complete artist he so often disappoints us.

Both colour and form are, in the work of Cézanne, almost free from the romantic emotional element, in spite of the naturalness of much of his execution ; for the stability with which his pictures are impregnated is hostile to instability, which is a necessary concomitant of emotionalism.

Impressionism, like most French things, is a trifle dry ; it has still unfilled vacancies. Not so is Greek art. Every whit as clear and precise as the French has ever been, it rejoices in a sharper, in a fuller precision ; and with that precision it leads us to the verge of the unknowable.

“ And the daisies which she (Nicolette) crushed in passing, holding her skirt high behind and before, looked dark against her feet.” It is a vision at least clear as that of the white arms of the serving maids, the white arms thrown into relief against the dark entry to the inner recesses of the palace of Ithaca ; as clear, but not as statuesque, as majestic. But the Frenchman is not content with a clear suggestion of possible beauty. He details the image : “ her hair was yellow in small curls, her smiling eyes blue-green, her face clear and feat, the little lips very red, the teeth small and white.”¹ Charming, delicate, but how far behind the veiled, weeping Helen, strangely like in face to some immortal spirit, the

¹ English translation by Walter Pater of a fragment of *Aucassin and Nicolette*, thirteenth-century French romance.

Helen who is else all undescribed. The Greek precision has led us to the uttermost limit of the power of words, the vision is fully ordered, complete to the edge of the impossible. It may be complained that I have compared a graceful story with the incomparable *Iliad*. My reply is that I am discussing the reason why there *is nothing* in French comparable with the great Greek epics—the *Chanson de Roland* is infinitely inferior.

Greek art was clear, full and suggestive. The landscape of Turner is full and suggestive, but confused and vague; the colour of Monet is clear, precise, but too inadequate and momentary in arrangement. In the even arrangement of the colour of Monet over the surface of the canvas one feels something analogous to the bas-relief arrangement of the figures of the *Bacchanalian Dance* of Le Poussin (page 258). Again we are never enticed into vague and mysterious distance by multiple colour combinations and movements, but we are kept in superficial, and immediate, contact with the subject of the canvas. The matter is set forth clearly and at once, even though profundity of expression be sacrificed. Indeed here the immediateness, the clarity itself is the ideal.

The quality of restraint in colour idea must not be confused with the use of the low-toned or nearly monochromatic schemes. Such schemes may be, generally are, unrestrained and vague, imprecise and unmeasured, while the most brilliant contrasts that the palette affords may be used in such a way as to convey undoubting clearly defined thought, and clearly defined thought is fully grasped, not unbridled, thus it is restrained. Clear thought does not necessarily forbid excursion into the only partly knowable, but it demands that the transition from the certain to the uncertain shall be exactly placed. It is this transition in the arrangement of colour in Turner's work that is vague, whether the actual tints employed to establish the relations be brilliant

or gray. The simple black and red and white of the Greek vase establish definite thought. The "symphony" in black and white of Whistler is vague and indefinite. There may be "power to despise and ignore" variety of tint, but there is deliberate libertinism of sensuousness in the arrangement of those tints which are admitted to his palette. We float, indolent in spirit, among gradated half tones in an atmosphere bereft of positive light, where forms are lacking in solidity, where clothes contain no living body which shall impose its construction on them. It may be replied that Japanese prints and, less so, Chinese paintings often ignore such constructional facts, and subordinate them to decorative principles. Yes; but they substitute absolute decorative conceptions, both in form and in colour, throughout the work. No attempt is made to give natural illusion, to suggest the vague multiplicity of the universe. In the country of the print we never float, undecided; and when colour and light and shade gradation is used in the Chinese painting, it is suddenly and definitely used. But this technique will be examined later. For all his slight exterior of decorative intention, Whistler remains essentially a sensuous painter, who seeks to give the natural illusion. The few decorative elements he introduces are mere masquerades.

XXV

TECHNIQUE

A SPECIAL study of the technique of painting, sculpture, and the allied arts should not really find place in such a work as the present, for the reason that what has been already advanced on general lines should be sufficient to indicate the means of classifying the different methods of handling the material. But such considerable importance is generally attached in artistic criticism to questions of handling that it would be well to discuss the matter a little more fully ; especially as such a discussion, if only on account of the additional examples thus introduced, aids the exposition of the general scheme of criticism proposed.

Perhaps more than any other of our artificially isolated elements of expression, handling should be concealed. In painting it is always easier to show than to hide brush-work ; and clever brush gymnastics generally hide by their presence an incapacity on the painter's part to treat fully and seriously the space of canvas they cover. Such work is really on a level with the obvious tricks of composition, such as an object clumsily placed to fill up a gap in the arrangement ; yet we generally hear unstinted praise accorded to evidently agile and empty brush-marks.

In writing about such a subject the chief difficulty one encounters is to establish clearly the difference between that love of excellent workmanship, that particular delight in the

means of expression that has always characterised great artistic achievement, and that empty and reprehensible ambition of many artists, especially in modern times, who only see in art the skilfulness of the execution. If we remember the conclusion to which we came: that artistic criticism after all reduces itself to a study of the personality, the present difficulty vanishes, and we see with understanding the inefficient technique of Cézanne preventing him from being as great an artist as his gift of sense of stability of form and intention of colour might have enabled him to be; we understand the incapability of the faultless technique of Velasquez to counteract a certain narrowness of philosophic view; we see it unable to supply the want of inspired plastic invention, that is, of the invention of plastic relations fraught with universal intention, thus are denied to him the first honours of artistic rank.

It is not easy to institute a division between what may be called *technique* and *means of expression*. In one sense the two may be taken as identical, in another not so. The point is usually slurred over. We are obliged both to state and to solve the difficulty.

If we consider all the work on the canvas or marble as so many relations established by the artist with a view to transmitting his perception of certain external objects, and at the same time his universal conceptions, we should naturally conclude that the artist endowed with the best perceptive and conceptive faculties will be the best technician, in the branch in which his personality naturally finds relations expressing his conceptions and perceptions, *i.e.* in the case of the poet, words, in that of the painter, colour, and so on. This undoubtedly is so, but perhaps it does not completely explain the observed facts; for, inversely, we frequently find empty and superficial artists to whom we cannot deny certain technical successes.

We are thus brought to think that while we cannot have full artistic expression without correspondingly excellent technique (cf. Cézanne) ; at the same time the artistic intention, although intimately allied to the technique, is in a way superposed upon it. The mind of an inferior artist may be able to produce workmanlike relations possessing excellent qualities productive of illusion or of rhythm, though these relations may remain abstractly silent.

Velasquez was gifted with a marvellous understanding of the relations of nature. He was endowed as well with an equally wonderful power of constructing relations in paint that should suggest those of visible nature. His genius was only at fault when it was necessary to imbue these relations with abstract intention, whether of objective or subjective kind ; the former he was almost completely incapable of managing, the latter he possessed to a certain degree, though to one less than we are perhaps in the habit of carelessly thinking. The psychology of Velasquez is definite and limited. He puts before us a series of studies of a series of individuals, it is not a synthetic whole. Velasquez is the servant of his model, both in matters of actual reproduction or visible exterior, and in soul-rendering ; both operations are scarcely more than consummate copying. Indeed the two operations should not be separated in his case, and one wonders if his psychology really is one. The Doria Pope in Rome is perhaps the most wonderfully lifelike presentation of a human being that art has to show us. So perfect, so full of character is it, so many pages of analytic physiognomy might be written about the keen and crafty facial expression, that we forget that Velasquez has not written them ; he has merely presented anew for us the original. The thing is distinguished, the result of a patrician mind, as are all the canvases of this proud and courtly painter, even when the figures of the subject, for instance *Los Borrachos*, little lend

themselves to distinction. But the distinction is a social and not a creative plastic one, if such an expression be permitted. The "Forge of Vulcan" in the Prado is a remarkable example of the limitations of this master of technique. Mercury, Vulcan and the rest are merely models seen by a distinguished personality in the distinguished atmosphere of his studio, his marvellous gift of technique allows him to reproduce for us this distinguished vision in an irreproachable way, and that is all. He is quite incapable of imbuing these representative relations with the philosophic perceptions and syntheses that his mind had never created.

Here we have a case of excellent technique at the service of an inadequately philosophic mind, but one that was at the same time far from superficial.

It is, I believe, the fashion to look on Velasquez as a greater master of technique than Rembrandt was. I must admit that I do not quite understand why, unless it be on account of the unhesitating, obvious, and economic nature of some of his later brush-work. Excellence of technique must not be thought to be in direct ratio to rapidity and economy of expressive elements. Technique is not the end. It is itself only the means, and consequently must be fitted to the expression of that which is to be expressed.

It is undeniable that the technique of Rembrandt fully expresses his mental outlook, that peculiarly concentrated form of synthetic psychology, subjective withal, that we know so well.¹ It is equally certain that the directly transcriptive technique of Velasquez was freer on this very account, for it had little or no afterthought of abstract intention to trammel it. Both techniques adequately rendered what they were required to do. Why should a comparison be instituted? The brush-marks of Velasquez are generally tidier than those

¹ Mr. George Moore makes of Rembrandt the primal discoverer of the "eternal feminine" (see *Avowals*). The thesis may be upheld.

of Rembrandt. The brush-marks of Titian's "Flora" are still more so; they are almost all invisible, fused into a general glow. "Ah! but there is the quality of the paint," I hear someone say. Now having painted several hundred canvases myself, I am not likely to ignore the difference between the abominable smeary brush-work of a M'Whirter, "painty" to a degree, as English studio slang has it, and the masterly treatment of a genuine Rubens (*e.g.* "The Judgment of Paris" in the National Gallery), in which the paint in some inexplicable way, without ceasing to be paint, becomes endowed with a strange new interest, a strange fitness to the varying textures, drapery, leaves, flesh, that it is called upon to represent. I am inclined to believe that this difference is not what one might term a fundamental thing, a thing apart; it is merely a question of more or less adequate and complete construction by the artist of his scheme of relations. You will never find a good and complete observer of nature using a "painty" technique. Paintiness generally, if not always, means that the artistic intention guiding the brush was insufficient. The experimental technique of the beginner is almost always painty in the case of an oil painting, woolly in the case of a water-colour. Continued correction by an unskilful hand results in paintiness, because the corrections are made in the same brush direction, which causes the paint to resemble American cloth in texture, and to lose all crispness of touch. The main reason why Titian and Tintoretto are not "painty" in their work is because they did not make mistakes, and consequently did not have to repeat, several times, the same tentative brush-mark. The unfinished Madonna by the former in the Uffizzi Gallery is very instructive from this point of view. The Madonna remains as a first painting; the child is completely finished. The planes and masses of the Madonna are unhesitatingly indicated by large square brushings, which pass over the surface and

vanish in the directions of the disappearing planes. The figure of the infant was of course begun in the same way, and then repainted at once in comparatively thin colour; it is complete in every way. Titian was certain of what he wanted to do, so certain that he could finish his picture bit by bit; instead of having to work all over the canvas at once, as most modern painters are obliged to do, stepping back from time to time to judge the effect in the whole of certain touches put on without any certainty as to their correctness. An evil of modern romantic and impressionistic art is that it has encouraged what one might term the experimental technique. Artists often begin painting a canvas with a very inadequate idea of what they are going to do, and are thus obliged to correct and alter from one end to the other of the work. In the encouraging of sentimental emotionalism the fact that picture painting is really a trade, and a difficult one at that, is lost sight of. An apprenticeship stage in the studio of a master assured to the future artist, in renaissance times, a thorough acquaintance with the elements of his trade. He learnt to grind colours, to prepare panels. He helped the master to square out his minutely made original studies, or to prick them off on the wall. He learnt that his master never began work on the final surface before being certain that he completely held his idea in all its details. So it is that the pictures even of the rank and file of renaissance Florence are such exquisite *objets d'art*. Nowadays painting is almost uniformly bad, largely on account of the fact that every student is expected to work out his own salvation. Painting is hardly ever taught; it would be indeed difficult to find many instructors with sufficient knowledge to teach properly. Even if the quality of the paint is good in a modern picture, the painting is generally badly done, in the sense that as skilled workmanship it cannot be compared with, say, good cabinetmaker's work.

Unquestionably, as I have said above, part of this insufficiency comes from the vague romantic ideal in vogue, and vagueness of idea demands vagueness of expression ; vagueness of expression is incompatible with precise work. But here again attention must be called to the danger of confusing tidy work with completely intentioned execution. Ruskin was right in calling finish added truth. The finish that only consists in tidying up the colour to the form's edge, or carefully executing a brush flourish, is thoroughly reprehensible. It will naturally be void of artistic intention, and will only express either the desire for tidiness, or the call for applause of skill. If another half inch of canvas remains to be painted, the colour on it must be carefully thought out, and intentionful ; the space must not be simply covered over and tidied up.

The good painting of Velasquez, Poussin, Titian, Tintoretto, and others of the painters subsequent to Leonardo and Michael-Angelo, is probably due in part to a conservation of the old workmanlike habits of the trade. They in their turn tried to render with as much precision as possible the vaguer relations of their more emotional outlook. Tintoretto is another excellent example of intentional brush-work. In the *Suzanne* of the Louvre the attentive observer may note one of the most remarkable brush-strokes in the history of painting ; it is to be found in the leg of the nude. I write from memory of many years' standing, but I believe the movement of the brush began at the knee, indicated the drawing of the planes of the shin, contoured the ankle and drew, with a double line, the form of the calf ; a short hurried stroke then crossed it marking the height of the patella ligament. This was of course the first painting subsequently covered by the final thin even coat. The result was far from painty, as it easily might have been, because every movement of the brush was fully and

firmly controlled, was instinct with rapidly varied drawing intention.

The farther we go the farther we seem to get from that technical excellence so prized by all the more objective and less emotional schools of art. A Chinese artist learnt how to draw noses or eyes separately ; he learnt how to hold his brush in order to draw them properly, just as a carpenter's apprentice learns how to hold a saw or a chisel. He executed many hundreds of such isolated exercises until he became a skilled workman ; then he began to turn his acquired skill to his own artistic ends.

The most casual study of Greek vases shows us a regular workshop formula of the human body, learnt by every aspirant draughtsman ; all this made for excellence in workmanship. To-day we are expected to content ourselves with the emotions of the painter, however haphazard may be the method of their expression. I have elsewhere (page 305) indicated another reason for contemporary technical inefficiency ; and in a certain way this inefficiency is an element in the expression of the incoherence of the times.

It is evident that the nature of the relations established depends least, for its exposition and transmission to others, on the technique. Indeed the division we are here making is, as usual, arbitrary and perhaps more than ordinarily hazy. Consequently the aim of this chapter is not to throw technique completely into the background among the means of expression, which as a thesis would be nonsense, but to call attention to the very popular error of attaching too much importance to the precise methods of putting paint on canvas, or of manipulating whatever material may be chosen as the expressive vehicle. One and the same artist, without in any way changing his personality, and as a consequence his abstract æsthetic scheme, may produce works of widely different external aspect. Indeed every painter who makes

pencil or charcoal drawings uses at least two different techniques, yet we have no difficulty in ascribing both the painting and the drawings to the same man: the nature of their relations is one and the same. We may often find the same painter using different methods of applying his paint to his canvas. In such cases the elements composing the relations are different but the resulting relation is the same, much as 2 is different from 3, and 4 from 6; yet, 2 is to 4 in the same relation as 3 is to 6.

We must then very carefully discriminate, in each case, between the different elements of a work of art which excite our interest. We must decide whether our interest is aroused by the validity of the established relations, or merely by the way (technique) in which commonplace relations are established and presented. Many artists, especially water-colour painters, owe a certain limited renown to nothing more than the unusual and gymnastic way in which they represent certain aspects of nature. As has been said, good painting technique is as difficult a handicraft in which to attain excellence as may well exist, and so may not easily be imitated or equalled; but all the same it must be relegated to quite a secondary position. In Titian and Franz Hals we may find two examples of first-class technique; one of the hidden, the other of the obvious type. Yet hardly to Titian, and far less to Hals, can we accord complete artistic pre-eminence. At the same time both are difficult or impossible to emulate. Their deficiency must then lie in the non-universality of the established relations, notwithstanding the consummate skill with which these relations are established.

In the case of Hals, what, after all, is his purely plastically expressed message? It amounts to little more than a skin-deep though intense feeling of fullness of life, seen, felt by a somewhat commonplace mind. When we have seen a Hals



'SUNFLOWERS.' BY VINCENT VAN GOGH. (Tate Gallery, London)

It is not easy in a monochrome reproduction to point out the more important modifications in the use of colour introduced by Van Gogh. However, on comparing this plate with Plate facing p. 286 (Claude Monet) the negligence by Van Gogh of light effect notation is evident: the vase is practically shadowless, the scheme of values artificialized. Decorative intention outweighs representation

we have seen an enlargement of the terms of life in the model skilfully shown to us by a master specialist. We receive a remarkable, an unforgettable impression of the momentary life and individuality of the model. In this way Hals might almost be ranged in company with the impressionists. Such end demands for its expression the nervous agile handling that he employed, which sometimes elicits the unbounded admiration of inefficient critics. Comparison of a Hals with the portrait of the Pope by Velasquez will reveal something of what is lacking in the former in spite of its obviously prodigious technique. Velasquez was several steps further on the road of universalisation attainable by psychological and emotional means. The comparison is justifiable. Both artists deal with the close portrait representation of humanity as their main means of expression. A comparison between Rembrandt and either of the other two would be less so ; for if he deals with the representation of the model, he uses it in his plastic scheme to express a psychology of his own ; in which he proves himself the greater, more universal artist in spite of a less able, at any rate a less obviously able technique, if the first expression give offence, as it may do with justice.

Those who have read the letters of Van Gogh will not be surprised to find him praising Hals. One of Van Gogh's chief claims to our attention lies precisely in a similar sense of the aspect of things, which, like Hals, induces him to use an obvious handling. Feeling the intensity of concentration on a certain point, or the primal necessity of certain decorative arrangement of forms, he furiously directs violent brush-marks towards the point or over the forms in question. The intensity of yellow to be attained at all cost by the piling up of cadmium, the play of complementary colour, the violence of handling is almost all he sees in the sunflower. It is the violence of actuality. This technique is of course

childish compared with that of Hals, but their ends are closely allied in spite of differences of subject, colour scheme and skill.

Besides this intense presentation of actuality another but morbid interest is attached to Van Gogh's work; that of the outlook of incipient insanity. It appears insidiously throughout his natural medium of painting, while it seems evidently lacking in his letters, at least in those that I have read. Perhaps a professional alienist might discover it.

XXVI

RECENT ART ¹

THE curious and unique tendencies of modern art are so unforeseen in their nature, so markedly distinct in intention from their forerunners, that they would seem to merit at least a chapter devoted to their study. It is true that were one to adhere strictly to the plan of this book no such chapter would find place in it. Fundamental postulates of the present work are: that the plastic elements of thought expression are limited in number; that variety of expression is obtained by compounding them in different ways. Expressed in the language of my own assumptions these become: the relations fitted to thought expression in plastic form are limited in nature and in number. Variety of expression is obtained by variation in the relations established between these primary relations; though it should be remembered that this separation into primary and secondary relations is really artificial and non-existent. Now examination of the natures of these elements or relations has been carried out up to the present without taking into consideration in any way historical sequence; it is consequently a derogation from principle to entitle this chapter as I have done. Indeed the study of expressing elements already executed should enable the reader to analyse for himself on the proposed critical lines, and to decipher the meaning of the tendencies of modern art. Nevertheless there are moments when

¹ Written in 1924.

clearness of exposition gains rather than loses when we quit the path of strict methodical representation. I am inclined to think that this is one of them. Hence the unmethodical title of this chapter.

There is another reason why this chapter might with reason be treated as superfluous. Modern art may almost be said to be an anatomisation of artistic expression, a conscious anatomisation which is without doubt the result of the development of artistic criticism during the nineteenth century. Consequently the subject matter of the preceding chapters concerning plastic, expressional analysis will be found to be displayed in a more open and patent way in much modern work than in the complete and often perfectly balanced work of preceding masters. I may go further, and say that had I not lived myself in this atmosphere of intensive examination, of continual analysis with a view to separating out essentials, I should never have written this book.

Never before in the history of art have we seen such a strangely chaotic period as that constituted by the first twenty-five years of the twentieth century. Side by side have flourished a most regular continuation of what, for want of a better term, we may call classic and accepted painting or sculpture, and a most irregular manifestation of neo-impressionism, of cubism, of a thousand and one modifications of either, not to mention the ephemeral doctrine of the futurists. If art be, as I have advanced, a transcription of the mentality of an epoch, my adversaries may find here excellent cause for dissent from my opinion. Perhaps this point alone will justify the inclusion of this chapter and bring it to a methodical position in the whole book. At no period has change of every kind followed so rapidly in the wake of change. The man who stoked Stevenson's first locomotive is still living. When we reflect for one short moment on the full significance of this statement it seems totally unbelievable. Rapid as

was the succession of change round about 1850, it has been still more rapid of recent years. Looking backwards through the records of history we are always inclined to compress and diminish in value the time factor. Four thousand years of Egyptian history seem to the casual thinker to represent an almost contemporaneous series of facts ; and do we ever realise that the length of time that separates us from Cleopatra must be doubled ere we can remount from the Roman conquest to the beginnings of Egyptian history ? In extended Egyptian circumstances coherence of thought manifestation in different forms was possible. To-day we are at the other limit of change rapidity. The motor-car, aviation, wireless telephony—and how many other factors of modern life ?—measure their existences by months rather than by years. How then shall such restless movement be transcribed to one crystallised plastic representation ? Is it surprising that we have overlapping of period, that we find some artists representing the thought of a few decades back, while others write down in swift stenography the story of the advancing wave-front of complex progress ? And this stenography is incoherent. Perhaps we should accept in its incoherent entirety the plastic output of to-day as the total transcription of the mean of modern thought.

The first break away from previous painting may be traced back to the impressionists, though, of course, they must in turn acknowledge a Turnerian parentage. Theirs may at any rate be looked on as a first consecration of the dogma of partial representation. By partial representation I mean the putting forward, with pretention to completeness of expression, of only a part of the factors that heretofore had been looked on as necessary for the production of complete work. The impressionists attached but little importance to drawing, but little to composition, but little to many forms of suggestion possible to the plastic arts. On the other

hand they concentrated all their efforts on the transcription of the immediate aspect of nature, as seen at a glance only lasting enough to receive a general "impression" of that aspect. With, but not of, them was Cézanne. Again incomplete, he was hypnotised by volume value, and by the duration of things. His transcriptions of nature were genial in some ways, in others more hopelessly incomplete than those of the impressionists. Colour and form are definitely divorced. Gauguin and Van Gogh now appear; the first remains rather a blind alley as far as subsequent developments are concerned; the second consecrates more than ever the emotional uncontrolled use of colour as a term of expression. But—and here is the historic significance of his work—he uses it in a new way. The colour of Van Gogh no longer aims at an illusory transcript of nature as did that of the impressionists; it is used as an invented factor of personal expression. Without Van Gogh we should not have seen Henri Matisse, who is, it may be, one of the most remarkable colour inventors that we have seen. But the form of Matisse is inadmissible; not on account of its lack of photographic accuracy, otherwise that of Cézanne would have equally to be cast aside. Matisse himself will talk of rhythmic arabesque distribution of line and area over the surface of the canvas. He has told me that he attaches as much importance to the shapes of the areas comprised between the contours of objects represented in the picture and the frame boundaries as to the shapes of the represented objects themselves. He places so high the desire of balanced composition that he will shorten or ridiculously elongate an arm or leg rather than invalidate compositional equilibrium. But all this does not constitute formal expression; it may even be said to be anti-formal. Matisse thus gives us another example of modern partial expression. To colour and compositional expression he sacrifices unhesitatingly all

other elements which may be concerned in the making of verisimilitude.

From Cézanne's doctrine (directly, but before him from Leonardo, from Dürer, from many others) concerning the simple geometric bases of natural form, Picasso elaborates cubism. He too will have none of the need of verisimilitude. We have progressed. We must now be satisfied with geometrical equilibria, without seeking to find in these equilibria any direct suggestion of the natural form of man or tree on which they were, or may have been, based. Just as a natural colour scheme may suggest to Matisse the invention of an artificial arrangement of tints, so may the aspect of a model suggest to a cubist a geometrical arrangement of volumes. It would have been curious to have seen the result of an alliance of the highly imaginative colour of Matisse (or to a lesser degree that of Van Dongen) with the complete detachment from representation in form that the cubists indulged in. Unfortunately the exponents of cubistical tenets have one and all been mediocre colourists. And again the more "stable" nature of brown and grey schemes of colour has induced cubists to employ them, though Cézanne rarely did so.

But all this amounts to the elevation of one or two expressional elements to the dignity of a complete means of total expression. Were these manifestations destined to last they would constitute the definite consecration of partial expressionism. However, this period seems to be drawing to its close. Already at the end of the war, the cubists were saying that they had practised and promulgated their credo only in the interest of improving and solidifying drawing. If this was not made evident in the primitive manifestos, such has at least been in verity the effect of the movement on recent draughtsmanship. On visiting the Salon d'Automne of 1923 I was struck with the general all-round improvement in volume drawing. Cubistic geometry had—save for some two examples—

entirely disappeared. But in its place had sprung up praiseworthy attempts at solid representation of natural form. Cubism is already demonstrating that its use has been to recall us violently from the impressionistic vision by flat *tache* or area of colour, and to rehabilitate three-dimensional sensation.

In spite of their inefficiency all these partial efforts claim their places in the history of art. The results of these researches, so often abortive, have modelled the direction of present tendencies already in function. Even fractional expression itself, by analytically separating the expressive elements of a complete work of art, has drawn our attention to the existence of the plastic language; which though it exists as well and better in a Poussin or in a Titian than in a Henri Matisse, still in the two former may be easily overlooked, meshed as it is within the verisimilitude and dramatic values of an impeccable representation. Until the impressionists brought the art world face to face with the possibilities of separating out the technical aims of painting, until they announced that, out of all the factors that enter into complete pictorial representation, they would limit themselves to the use of immediate transcription of colour and value elements which should aim at doing no more than represent an instantaneous impression,¹ until then grammatical and syntactical examination of the plastic tongue was scarcely possible. Before their time there had been, indeed, much wordy warfare round the respective theories of Ingres and of Delacroix, much discussion had risen up with regard to the merit or otherwise of the painting of Jean-François Millet, but these discussions had taken the shape of polemics concerning the justifiability of painting a complete picture in one way or in another, whether it should be carefully finished by Ingres, or left in a somewhat sketchy and

¹ Let me not be supposed to mean that their manifesto was couched in exactly these terms. I am re-editing in the light of later developments.

highly emotional state by Delacroix. It was always tacitly assumed that there was a subject to be painted, to be represented; it was mainly the method of representation that was called to book. Sometimes indeed it was the subject itself: was Millet to paint unadorned peasant life? The impressionists began, Cézanne continued the disintegration of artistic expression. Then Van Gogh carried the matter still farther and introduced intentionally modified colour. Matisse and Picasso, the one in colour, the other in form, completed the dismemberment. The analysis was total. It now remains to synthesise anew in the light of all this preceding laboratory experiment, which has usefully played the part of waking us from a sleepy decadence towards admiration of scholastic representation, of literary emotion, of clever but superficial technique. We have now been taught to look anew for those purely plastic qualities that masters of all periods have known how to include unconsciously in their work, much in the same fashion as the Greeks included perfect anatomy in their statues, while they remained remarkably ignorant of that science in a direct and conscious way. In the future we shall consciously include in our work the newly found plastic syntax, just as Michael Angelo consciously included the newly studied anatomy in his figures. This is the art of the future; it has already commenced. The analysed fragments are now being collected and recombined to a new synthesis.

That such scientific analysis of art should coincide in period with the intensive scientific study of modern times should not surprise us. Art reflects the nature of the epoch. The later nineteenth century was analytic in scientific tendency; it was theoretical to a large extent; now sixty or more years later we are applying the theoretical equations of Clark Maxwell to wireless telegraphy.

One is of one's epoch. In spite of all the inadequacies of

a canvas by Henri Matisse I would rather hang it on the wall of my room, than I would a Titian refulgent in glowing completeness. This, as I have before observed in the beginning of this book, is in no way equivalent to a statement that Matisse is superior to Titian. In reality it is hardly a statement concerning them at all. It is much rather a description of me, of my own tastes and tendencies. I have ceased to be an unbiased and general critic ; I am giving free rein to my own personal likes and dislikes. Curiously enough, though a sculptor and draughtsman myself, the researches of the cubists have interested me much less than those of the colourists. Is it because I instinctively feel that my own line of march is marked out and that it does not lie precisely in that direction ? Am I too intensely attached to the living beauty of form to admit of a caricaturing of it under the aspect of accumulated geometrical rigidities ? Do I hesitate to see the utility of prolonging a plane far beyond the normal limits of the form in order to obtain some new arrangement of planes and volumes which after all is no better, mayhap not so good, as one obtained in a more natural way ? It is difficult to say. Probably all these points combine to determine my dislike. Then the fact that I delight in vivid and luminous colouring without doubt prejudices me against the usually dull and often dirty tinting that has been allied to cubistic painting. At the same time my own work has been influenced, if not by the cubists at least by Cézanne, and probably it has been influenced by cubism itself. It is not possible to separate out the exact effects of environment on one's work. The difficulty is increased when one remembers what I said a few pages back : that all the data of cubism are implicitly contained in previous masterpieces. Did I obtain what I consciously or subconsciously use of the modern doctrine from the earlier or from the later source ? It is usually impossible to say. Probably I generally obtained

the facts from the previous work, and the desire to look for them from the mind tendency of my own times.

A page or so back I have implied that there will be in the art of the future a conscious collaboration of categoric thought, that reasoned thought will, so to speak, collaborate with subconscious inspiration in the production of valid works. This statement will arouse hostility in the ranks of those who maintain that art is naught but immediate transcription of the artist's individual emotion. This view of art is held by, amongst other critics of art, the purely emotional artist whose work is entirely subjective and unmeasured, and who generally deals in sentiment. Such an artist's mentality is in its very nature confused. The charm of his work lies in its confusion (just as the charm of a disordered coppice is due, above all, to its disorder), which in a kind of way reposes us from the inevitable ordering of daily life, as well as possessing the suggestive qualities that I have examined elsewhere in their proper place. It will soon be found, however, in practice that such an artist is strangely incapable of fulfilling with success certain artistic needs. He will be but a poor substitute for a Puvis de Chavannes when it becomes necessary to decorate a great wall space. Unbridled individual emotion shows itself here to be unequal to the task. Michael Angelo has been classed as being in major part an emotional artist. From the abstract æsthetico-philosophical standpoint he was undoubtedly of that category. But in practice, in the execution of his inspirations he was capable of reflecting on his work, of making all kinds of voluntary calculations, of consciously determining, inventing and carrying out in a special way, fitted to the needs of the particular occasion, certain parts of the work. Without this gift he would never have decorated the Sistine vaults. This is one of the points the verity of which actual practice in the arts brings home to one. The practising artist is in continual contact with

practical exigencies of the situation. His "inspiration" must fit, must be made to fit, in with all sorts of extraneous data. The shape of the Sistine vault had to be considered. The suitability of scale juxtaposition of different pictures composing the whole decoration, had to be thought out; in the "Last Judgment" an essential part of the composition is the varying scale of the figures according to their places on the wall nearer to or farther from the spectator. All these are difficulties that the painter of small emotional canvases, each isolated and complete in itself, does not meet with. He can start straightway on his work; and, painting directly from the model, can unconsciously transfer his emotion, brush-mark by brush-mark, directly to the canvas. Not so a decorator, emotional or otherwise. He must curb and manipulate his emotion; his first emotional study must be squared out on the larger surface; he must try to feel again his first emotion when the time comes to start work on the final wall. In a word, the whole business is much more deliberate and reasoned out. The artist of the emotional type, who has never found himself in contact with these and analogous limitations of his emotional freedom, is liable to ignore their existence. How much more so is another class of critics who criticise and philosophise from the outside position, whose acquaintance with practical art is at most limited to the execution, it may be, of water-colour sketches! Such critics will only see and admire in the Sistine vault the superb *envolée* of heaven-sent inspiration. They will state that art is an unreasoned thing, a direct communion with God, an unconscious working of the hand divinely directed, a magnificent madness. They will remain blissfully ignorant of all the practical difficulties that the painter encountered in his task. There will be a certain proportion of truth in what they advance. The first inception of the ideas may merit the phrases, but then comes all the completing of odd

corners, the modification of the first idea to fit the circumstances, the intentional reproduction of the first emotional state in order to weld together the added fragments and those parts due to the first emotional inspiration ; for all must be homogeneous in quality. Almost everything that has been written in the way of artistic criticism is invalidated by the omission of such considerations. Lest I should be accused of exaggerating the frequency of such reasoned factors, it is perhaps necessary to call to mind that they enter into—and to a great degree—the production of the works one automatically looks on as conclusive. The poses of the Elgin Marbles were such as enabled them to fit perfectly into the pediment of the Parthenon ; and a glance along the faces of the groups as they are exposed in the British Museum will reveal the fact that the foremost points of the statues lie all on one plane : that of the front of the pediment ; nothing projects beyond it. Think you that this be the result of the working of wild uncontrolled irreflective emotion ? No, my friend. Experienced worker myself, I can take upon me to tell you that, Pheidias or no Pheidias, such work is the fruit of much thought, of much intentional calculation. To such a degree is this true, that when one has produced sculpture, architecture or painting oneself, one is often more struck with admiration for the ingenious ways in which such a man has vanquished his difficulties, than for the absolute, abstract, artistic value of the work.

Into the decoration of the Sistine Chapel entered consciously studied and consciously applied anatomy ; there entered also consciously applied decorative and other knowledge. I see no reason why into the art of the future should not enter the results of consciously studied and consciously applied plastic æsthetics, without compromising the purely artistic value of the work any more than that of the Sistine Chapel is compromised.

XXVII

CONCLUSION

IN the foregoing pages an attempt has been made to coordinate, to group the diverse artistic manifestations that we feel to be valid. Their examination has taken a double line : that of the means employed, and that of the impression made by the means on us. An exact examination of the first is possible when we have sufficient practical knowledge of the subject, and a sufficiently scientific and unbiased spirit to examine its every side. The second is distinctly the more difficult question. It demands, it postulates an artificially sensitive personality open to suggestion from widely differing sources, and capable of vibrating in harmony with ideals curiously separated. To fulfil such a condition completely is probably impossible. I have continually attempted, first, to educate, and secondly, to control, by intentional elimination of prejudice, the natural quantity of artistic sensitiveness with which I am endowed. To what degree I have been successful the careful reader may now judge ; but if I have not classed one of his particular heroes as high as he would wish, let him be sure that he has devoted at least as much attention and study as I have to those artistic manifestations to which I have given precedence, in all or part of their expression.

Though a certain degree of success may be possible in these two divisions of the subject, success in a third would

seem at best to be based on the plausibility of an hypothesis. I speak of the nature of the junction between the artistic presentation and the mental state aroused in the observer, or what is a similar, if not identical, problem, the transition from the artist's personality to the directing of his acting hand. We touch here the fundamental problems of psychology which will certainly remain for ever impossible of solution. To bridge the gulf, alas inefficiently, I have suggested the hypothesis of analogy (whatever that may mean) between relations (whatever they may be) established in the universe ; which, for simplicity's sake, I suppose the universe to be. These relations take different forms, they are now an external object, now our personality, again the produced work of art. The last is the result of analogies, of co-ordinations occurring between the two former, and is enveloped at least by the second.

Such a point of view, aided by certain other observations which have been noted in the text, inevitably brought me to what may be termed an integral philosophy, in which the usually accepted differences between time, space, matter and life or the personality tend to disappear. I was rather surprised to find that the tendency of modern physical science had, unknown to me, developed on similar lines. After all this is only natural, for a thinker is indissolubly linked to his age ; indeed history may be presented under the form of sequence of ideals. It is only by thought sequence that we perceive the passage of time itself.

The truth of all philosophies is relative and resides in their greater or less integrality of form. The philosophy of Plato was unbelievable to Descartes ; that of Descartes is unbelievable to us. Both live by the validity, by the beauty of the relations and the equilibria established within them, live as Greek sculpture lives, on account of this mysterious inexplicable analogy, harmony, call it what you will, of its

nature, with that of the universal or of the Infinite ; which, though beyond our comprehension, so imperiously from age to age imposes its conception on the mind of mankind, either clearly as a philosophic factor, or confusedly under the garb of superstition, according to the thinker's mental grasp.

Such philosophic considerations I have perhaps been tempted to develop rather more fully (yet withal very incompletely) than the title of the book would warrant. My excuse is that much of the objective view of art subsequently put forward would remain insufficiently intelligible without such development.

A difficulty presents itself. We are obliged to distinguish between good work and bad, between that which is artistically valid and that which is not. Extending anew our transcendental hypothesis, we propose that artistic validity should be defined as an analogy between the integral relations of the work of art, and the integral relations of the universe ; both, of course, as perceived by us, we having no other criterion.

Regarding the whole extent of artistic manifestation, we are struck with a strange divergence of ideal. That expressed on a Greek vase seems irremediably separated from that expressed in the fluid tones of a Turner water-colour. However, a closer study of the subject enables us to fill up step by step the intermediate gap ; and we construct a continuous scale of artistic ideals, one end of which we term the objective or universal end, the other, the subjective, particular, psychological one. At the same time we remember that all such classification is arbitrary, and as such untrue. It is merely a help to the inefficient human mind incapable of perceiving phenomena in their (probably) true and indefinitely complex relations. We add as a subsidiary hypothesis, and one useful for explaining, or, more correctly, for definitely exposing the differences between the natures of the expressive

elements of the two groups, that one end of the scale may be viewed as being more objective, more directly analogous to the universal relation, than the other which approaches such analogy through the complexity of the indefinite and the personality. We here make use of the clear distinction between the indefinite and the Infinite established by Descartes in his correspondence with Gassendi.

It now remains to examine, in the light of these hypotheses, the means by which the plastic artist may establish relations which shall fulfil in one way or another the conditions indicated above, relations which shall be entitled to a position, now nearer to one end and now to the other, on our suppositious scale of artistic validities.

Again we have recourse to artificial separation, and divide our subject into hazily separated but useful divisions ; such as sculpture, drawing, colour, chiaro-oscuro, and the like. At the same time we strive to remember that all such division, all such classification is destructive of the truth and life of the examined subject, whose very essence *is* its integrity. When we have differentiated we must integrate anew. A dissected corpse can show us certain facts of material arrangement which are the necessary concomitants of life ; but life itself we cannot study on the divided and inanimate body.

In examining line, colour and the other elements turned to artistic use, we find that they may in each case be classed in the same group as the whole work, which is indeed dependent for its integral effect on the sum of the effects of its parts, or, perhaps more correctly, on the general relation established among the minor relations, which, naturally, transmit their nature to the resultant one. We find that the emotion of a subject treated by a romantic painter is echoed and repeated in the emotional and unmeasured quality of a contour on the canvas. We notice how different in quality this fragment of contour, imbued with exalted haste, is from the measured

rhythm of a Greek contour, that reflects in its smallest parts the untroubled universality of the whole statue.

To arrive at this result with any degree of success we have been forced to make certain excursions to the right and to the left of the main line of our thesis ; to examine, for example, some of the essentials of construction of the human frame, to verge upon the domains of artistic anatomy. In a like manner we have been obliged to enter a little into the technical use of non-luminous tints in order to produce an illusion of light. Again we have discussed superficially, and in passing, some aspects of a subject in which much work remains to be done, and which might be termed ethnic philosophy. We have noticed that art, an unconscious product of the national personality, is, to those who know how to read its language, an unerring index of national character ; that conclusions drawn from artistic sources may be applied with certainty of success to such problems as the inter-relation of artistic expression and historic social and political state. The question whether the arts should be looked on as instigators or as resultants of national tendencies at a particular moment does not present itself in terms of our transcendental hypotheses ; for we have seen that the terms *cause* and *effect* are probably meaningless, presupposing as they do time sequence. What we ordinarily understand by their sequence is the inevitable manifestation of the actual relations.

Much of the examination of the work of different schools, of different masters, I have reluctantly left aside. It falls more readily into the scheme of a history of art rather than into that of this volume ; though such deeply interesting questions as the reason for the curious analogy between the paintings of palæolithic Altamira and the fundamental plastic characteristics of Chinese art are tempting indeed to study. Palæolithic art seems to have been, like the philo-

sophical conceptions of Tahiti, an art developed to its full ; one not indeed destined to achieve a high level of technical complexity, but within its own frontiers complete and " fully orbéd." It disappeared, leaving its place to a neolithic negation, or perhaps we must say beginning, which never seems to have reached a completed state, but to have been absorbed into the general stream of occidental art development.

Certain races seem to be endowed with the penetrating perceptive power that rapidly creates a great art. Such were the Palæolithic men of Europe, the Egyptians, the Hellenes, the Chinese. We see that the power to create works of a universal import does not appear to be a necessary function of civilisation as the word is generally understood. On the contrary almost, the synthetic spirit necessary to the conception of universal, as distinguished from particular and subjective work, would seem to suffer in its freedom among the inevitable surroundings of differentiation and analysis that a complex society generates.

Few schools and fewer artists have been named in the course of this work, which professes to be less one of particular criticism than an examination of the nature of the essential elements of art. The field of co-ordination is already so large that it seemed to be better to avoid, as far as possible, additional chances of confusion in the introduction of numerous examples. When an artist serves as an instance of two or more different qualities, I have referred to him anew, instead of to another who perhaps would have fulfilled the conditions more perfectly. The repetition of the same name has the added advantage of calling attention to the uniting of two qualities in the one man. The development of such a subject in a form entirely devoid of comparative critical writing is evidently difficult if not impossible. It would reduce itself to almost postulate-like statements of such an abstract

kind as to be unconvincing, and not even readily understandable. The examples chosen serve as illustrations to the abstractions advanced. They are selected for their type qualities. Thus, when one had discussed the variation of the formal ideal through Egypt, Greece, China, and mediæval France, the reader should have a sufficiently clear idea of the formal tongue to make a particular discussion of, say, Assyrian work unnecessary.

In closing let me again repeat that all these analyses, all these hypotheses are essentially unnatural and untrue, for art is in its essence integral, and it is by this integrity alone that it feebly reflects the greater integrity of the universe. This detailed examination will, however, have more than justified its existence if so be that it aid one iota in the understanding of that occult and beautiful thing that is Art.

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