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# CHAPTER 22

## *Bridges to creativity*

### **Introductory**

*The dual purpose of this chapter is to provide a résumé of ideas presented in the two books contained within this volume<sup>1</sup> and, along with Chapter 23, to provide a bridge both to the two BOOKS in the volume on painting<sup>2</sup> and to the volume on “creativity”.<sup>3</sup>*

*The common motivation of all the four books in this series<sup>4</sup> is the desire to penetrate the mysteries of artistic creativity. Since the definition of creativity requires a going beyond existing knowledge, readers might understandably be puzzled by the emphasis on “accuracy”.*

*Although always believing exact representation to be uninteresting as a goal in itself, my guiding hope was that finding explanations as to why virtually everybody is hard pressed to achieve it, would make a useful starting point. The passage of time has confirmed the validity of this act of faith. It turns out that seeking accuracy can:*

- *Enable new ways of looking, capable of helping people to become more appreciative of the multiplicity of delights that surrounds them in their visual world.*
- *Engender feelings, ideas, and perceptions that can act as springboards for going beyond the limitations of accuracy, thereby making it possible to embark upon personal and creative journeys.*
- *Provide fascinating, salutary and inspiring insights into the nature of*

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1 “Drawing with Feeling” and “Drawing with Knowledge”.

2 “Painting with Light” and *Painting with Colour*”.

3 “Fresh Perspectives on Creativity”.

4 “What Scientists can Learn from Artists”, “Fresh Perspectives on Creativity”, *Drawing with Feeling*”, “Drawing with Knowledge”, “Painting with Light”, *Painting with Colour*”.

*visual perception.*

- *Enhance self-awareness.*

*In this and the other volumes in the series much is written about “Modernism in painting”.<sup>5</sup> According to the interpretation proposed, this movement got underway in the 1860s, when a confluence of factors led to a deep questioning both of the nature of painting and of its justification as an activity. To the modern ear, this may not seem particularly remarkable, but at the time it amounted to nothing less than a paradigm shift. For the first time in history the artistic community began to focus its attention on fundamental issues such as:*

- *How do images coming to the eye from paintings differ from those coming from natural scenes?*
- *How do images coming to the eye from paintings differ from those coming from photographs?*
- *What is reality? Are there alternative realities?*
- *What is beauty and what is ugliness?*
- *What is “good” and what is “bad”?*
- *What is creativity and how can it be achieved?*
- *How can artists express themselves through painting?*
- *Have artists a legitimate role in society?*

*From the multiplicity of answers suggested, certain themes emerged that were to be explored in depth in the coming decades and which are still very much with us. Some of these took artists beyond drawing and painting. However, it is these two disciplines that provide the focus of my four volumes.*

*In what follows in this chapter, important roles will be given to Cézanne, Van Gogh, Toulouse-Lautrec, Seurat and Matisse. The thumbnail sketches relating to each of these artists are used to represent strands in the evolution of ideas by a whole community of researchers, none of which was the exclusive domain of any of them. The presentation is in terms of my sense of the spirit of the ideas rather than in pedantic form .*

*As an introduction to these, there follow a few words on “alternative realities”.*

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5 In Particular “Fresh Perspective on Creativity” Chapter 6.

## ALTERNATIVE REALITIES

One of the reasons for the creative potential of the accuracy aspiration is that it can lead us to a better understanding of the nature of our own *visual awareness*. Part of the explanation for this is “*shifting sands of appearance*” that faces anyone trying to trying to pin down precisely what things look like.

### **Instability**

Perhaps the most familiar manifestations of this instability relate to the continuous variations caused by changes in lighting and viewing conditions. Others manifestations that frustrate artists are movements that occur within the scene being represented. There is a long list of these, including fidgety models, effects of wind and the growth and decay of organic matter.

Less often mentioned, but arguably more important, is the degree to which our eyes routinely deceive us. Degas, clearly influenced by ideas coming from scientists of visual perception, summarised the negative and positive sides of this fact of life in a characteristically pithy way: “*One sees how one sees. It is false, but it is this falsity which constitutes art.*”

The main cause of this scientist researched falsity was that visual experience is a creation of the eye/brain. Two manifestations of this underpin Degas’ aphorism and go a long way to explaining the difficulties of artists when attempting accurate representation. They are:

- *The constancies, of size, orientation, shape, etc.*
- *Simultaneous lightness contrast*
- *Simultaneous colour contrast.*

If ways of discounting the influence of these phenomena on the way we see the visual world cannot be found, all relativities will be incorrectly assessed and, consequently, literal accuracy will be sacrificed.

### **Personal history**

The scientists also discovered that the manner in which our personal history forges our responses has a determining effect, not only on what we notice and what we ignore but also how we *feel* about what we are looking at. Accuracy will inevitably be sacrificed, but potentially in expressive ways.

### Multiple realities

In summary, it turns out that there are many *different realities*, some measured, some due to the distorting power of visual systems and some tied up with personal history and the *feelings* generated by it. In the past, the fact that *accuracy* has been given such an important place in the tradition of teaching has meant that the *feelings* have not been given enough emphasis. It is high time to focus on these.

The question arises that, if the *constancies*, *contrast-effects* and *feeling-guided selectivity* determine our actual visual experience, should we be trying to discount them? Would it not be better to abandon *literal accuracy* in favour of this *experienced reality*? Certainly the *Young Impressionists* and their *Modernist* successors thought so.

### PERSONAL HISTORIES AND FEELINGS

One way of doing so is to characterise how different artists dealt with this situation. I start with Paul Cézanne.

### Paul Cézanne

Cézanne was not alone in his conviction that *the measured reality*, as described by the rules of linear perspective and anatomy, may not be the only reality for artists to explore. On the contrary, this possibility was common currency amongst the community of *Modernist Painters* of his day. Indeed, the notion of representing alternative realities has a history going back as far as the Italian Renaissance at least. Thus, for example, as a young man, *Michelangelo* sought to depict a perfection of human appearance beyond that which could be found in the actual world. Perhaps the best known example is the depiction of Adam on the *Sistine Chapel* ceiling. Later, in his old age, in the studies he made when preparing for producing “*Rondanini Pietà*”, he struggled to reveal the essentials of human nature, by mining down beneath the surface of outward appearances. Later, *El Greco* and other *Mannerists* took up the banner of *idealisation* and, in the process, developed the elongated figures that are characteristic of their work. Also, throughout this period, as in earlier ones, artists had no problem with imagining angels that defied the laws of gravity... Obviously, the list could go on.

However, Cézanne's arguments were different to those of these predecessors. Far from thinking of himself as idealising or even distorting, *he was interested in painting reality as he actually saw it*. According to his conception, the laws of linear perspective produce *untrue images*, for the simple reason that they did not correspond to his living visual experience. In this respect, he was joining Monet, Renoir and the rest in throwing any laws that ran contrary to the evidence of their eyes "*out of the window*". But his insistence that *perceptual distortions* are actually the *truths of experienced reality* was a giant stride further than the others has made. As was his belief that it is these perceptual '*truths*' that artists should seek to capture in their work. It was a revolutionary idea, giving all who espoused it permission to venture upon many hitherto unexplored pathways.

### Vincent Van Gogh

Before Van Gogh arrived in Paris in 1886, he had spent some five years developing his skills as an artist. In particular, he struggled to master drawing skills. He came to the task knowing a lot about art history and contemporary art. Throughout he was motivated by well formed convictions, wanting above all to make an art capable of expressing his passionate feelings. What he desperately wanted was to make paintings carrying a sufficiently powerful emotional charge. As the following anecdote makes clear, he realised early on that the conventional academic teaching of his time could not help him.

In 1883, Van Gogh was attending drawing classes at the Antwerp Academy. There the other students marvelled both at the rapidity with which he worked and at the fact that he did the same painting or drawing over again, ten or fifteen times. One day, the class was required to copy a plaster-cast of the renowned Greek sculpture, known as the *Venus de Milo* (Chapter 8, Figure 4). The enormously accentuated the hips of Van Gogh's drawing so upset the teacher that he seized it and tore it up in fury. Van Gogh, in his turn, "*flew into a violent passion*" exclaiming: "*So you don't know what a young woman looks like, God damn you! A woman must have hips and buttocks and a pelvis in which she can hold a child!*"<sup>6</sup> With this outburst, he brought his formal training to an abrupt end. It was plain for all to see that he was on a head-on collision course with traditional ideas. Later on, in summing up his goals, Van Gogh expressed a determination to be able "*to draw more freely and with more exaggeration.*"

If we put the anecdote and this quotation together, we can reach the legiti-

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6 From: Van Gogh, a Self Portrait, edited by W. H. Auden, 1961, Thames and Hudson.

mate conclusion that the Dutch artist believed that he could make his paintings *more realistic* as representations of the human condition *by using a significant degree of exaggeration*. Although this idea of realism was very different to that of Cézanne, the important point in the present context is that both men were proposing *alternative realities* to the one assumed within the academic tradition: the Master of Aix a *perceptual* reality; the Dutchman an *emotional* one.

### Henri Toulouse-Lautrec

Some readers may be surprised to see the name of Toulouse-Lautrec in this list, for he is not often enough accorded a primary role in the evolution of art ideas. However, a strong argument can be made that he was the first artist to build into his practice the realisation that creativity necessitates *a journey into the uncertainties of the unknown*.<sup>7</sup> It was for this reason that, on many occasions, rather than offer fully worked out solutions, he preferred to present unanswered and, therefore, *thought-provoking propositions*.

One of the anecdotes that has come down to us relating to the artistic attitudes of Toulouse-Lautrec describes an encounter with a man whose appearance excited his painterly interest. After asking if he would agree to pose, the artist added, *“It will probably not look like you, but that is of no importance.”* Here, once again, we find the academic tradition and the importance of exact representation being put into question. However, this time it is being doubted in a more radical way. Cézanne and Van Gogh felt that they had a relatively clear perception of what they were aiming at. Toulouse-Lautrec was under no such illusion. Groping his way in the dark was a part of his method.

It takes something of a flight of the imagination to think of Toulouse-Lautrec as a mathematician but, had he been one, he might have stated the situation as follows:

*“If all individual objects have an infinite number of possible appearances and, yet, can still be recognised on all occasions, there must be an infinite number of different ways of making recognisable drawings of them. But this by no means exhausts the possibilities. It is clear, from the recognizability of caricatures and other evidently and evidently distorted images, that there must be at least some recognisable representations whose linear relations do not map onto any of the infinite number of possible appearances. If so, we are left with the question as to*

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<sup>7</sup> This argument is elaborated in Chapter 7 of *“Fresh Perspectives on Creativity”*, the title of which is, *“At last I don’t know how to draw - Toulouse-Lautrec the first Modern Painter”*.

*whether there are any limits on such recognisable distortions. In the absence of a single good reason why there should be any at all, we are left to conclude that there must be a second, alternative infinity of possible arrangements of lines and marks which could stimulate recognition.<sup>8</sup>*

Though, of course, none of them would not have used these terms, it was this *second infinity* that fired the imagination of Toulouse-Lautrec and so many of his twentieth century successors.

### Henri Matisse

Amongst the admirers of Toulouse-Lautrec was Matisse, who made a famous experiment involving the production of four self-portraits. His proposition was to make a set of four line drawings each as unlike the others as possible, while still maintaining a “*likeness*”. Whether he succeeded or not, it remains a fascinating idea and one which draws pointed attention to the infinity of inaccurate drawings which our visual systems could and would recognise as accurate.

### Georges Seurat

Seurat is celebrated for his contribution to the evolving story of the depiction of light. What is less widely known is that he also pioneered ideas relating to the *expressive potential of line*, based on the notion that different orientations stimulate different feelings. Thus, he believed diagonals to be more “*active*” than horizontals, which symbolised a *state of rest*.<sup>9</sup> As with so many of the ideas of the time, artists who held them found themselves pushed inexorably in the direction of *distortion* or, as was often the case, beyond it to *abstraction*.

## LIMITS ON ACCURACY

The above territory can be approached from a different perspective. As asserted in many places, one of the main findings from the *University of Stirling* experiments confirms something that everybody already knows, namely that most people find it difficult to make accurate depictions of objects and scenes. Both the ‘*BOOKS*’ in this volume provide evidence and arguments that explains why. They indicate that the difficulties encountered are a reflection of ways in which

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8 This alternative infinity should surely be taken into account by scientists bent upon understanding the mysteries of image-interpretation, whether it be done by brains or by computers.

9 William Innes Homer, 1964, *Seurat and the Science of Painting*. MIT Press, Massachusetts.

the eye/brain's visual systems work. Nobody who understands these should be surprised to find that truly accurate drawings are very rare indeed.

### Defining accuracy

So what does the word “*accuracy*” really mean? Anyone using the word can only be talking relatively. Different people have different ideas of the limits within which the term is acceptable. What is so fascinating is that these can be so difficult to agree upon. It seems that arguments can be made to support statements that, on the face of it, seem to contradict each other completely. It turns out that what many might suppose to be demonstrably “*accurate*” can, by other people using other standards, be described as “*inaccurate*” and visa versa. In “*What Scientists can Learn from Artists*”, I refer to a group of *perceptual psychologists* who were investigating the value of *Identikit* images<sup>10</sup> and explain how they had fallen into the common trap of thinking of accuracy solely in terms of a mapping onto a photographic reality.

Extraordinary as it may seem to artists, they thought that tracing round the contours of photographic images would give *accurate* rendering of people's faces.<sup>11</sup> Just try the experiment and you will find yourself having to make many difficult choices as to what is an edge and which edges to include. You will be very lucky if you end up with a likeness. You certainly will not if you chose to give all edges the same intensity of line (the normal outcome in tracing). Despite these fundamental shortcomings, this highly questionable way defining accuracy was adopted by the group of scientists in question.

A potential way of producing more recognisable *Identikit* pictures would be to focus on the factors which enable “*recognition*”. The only criteria of success would be whether the subject-matter is recognised.

As made clear in “*What Scientists can Learn from Artists*”,<sup>12</sup> the eye-brain controls *conscious, analytic looking behaviour* by recourse to existing knowledge.<sup>13</sup> Self evidently, it can only do so if a knowledge-base has been built up using information contained in the patterns of light that enter the eyes. However, fulfilling this basic requirement would be of little use enabling the experience of

10 Assemblages of parts of photographs of faces (eyes, nose, mouth, hair, chin, etc.) that witnesses claim have something in common with the suspect.

11 “*What Scientists can Learn from Artists*”, Chapter 7.

12 Chapters 18-21

13 In other words actions and thoughts are controlled by experience-based memory-stores in a *top-down manner*; or to put the same thing more succinctly, they are knowledge-driven.



visual perception if evolution had not developed a way of achieving *recognition* and, as explained this vital step can only be achieved by making use of *cross-correlations* between numbers of different crude descriptions, within different modalities of input. There is no other feasible way that a visual processing system could enable the discovery of common properties of objects, including the faces of family and friends, whose shape and colour vary with every change in the four part relationship between the object to be recognised, the viewer, the context and the lighting conditions.

One perhaps surprising, but inescapable implication of having to start with *recognition* is that *the contours of objects* have little relevance to whether or not something is recognised. This must be the case, since their infinitely variability ensures that they cannot be perceived as being the same on two occasions (the fundamental requirement of *recognition*). From this simple truth it follows that tracing cannot be the answer. Even if they did not understand why, this was evident to artists, who would have to accept that theirs was essentially a journey into the unknown. It was in the knowledge that solutions would not come easily, that so many of them turned to experimenting with distortions, exaggerations and shots in the dark.

In view of these basic facts of visual processing, the psychologists seeking *Identikit* likeness would have to abandon methods depending on tracing and find alternative ways of producing recognisable images. One difficulty they would face would be finding artists with a level of skill a great deal higher than that needed for tracing photographs.

In summary, it is small wonder that the whole question of accuracy in drawing from observation is shrouded in paradox. Anyone who thinks it possible to characterise visual experience via exact representation of contours, needs to think more deeply. It was towards a more psychologically and (though they could hardly have known it) more neurophysiologically plausible truth that artists, such as Cézanne, Van Gogh, Toulouse-Lautrec, Seurat and Matisse, were groping.

### FEELINGS IN MARK-MAKING

In “*Fresh Perspectives on Creativity*”, it is argued that artistic creativity can only occur if the artists’s imagination is forced into new territory by means of *constraints* on their habitual ways of doing things. In “*What Scientists can Learn from Artists*” evidence is provided to show that most, if not all, traditional artistic

practices<sup>14</sup> are effective because they do just this.<sup>15</sup>

A problem which prevents many contemporary artists from using these constraining practices is that they see *constraints* as erecting barriers against the free expression of their feelings and, more generally, their creativity. Accordingly, they shun constraints that lead in the direction of what they regard as “*mere accuracy*”,

Something needs to be done about this situation. That is why a major objective of the *feeling-based drawing lesson* in ‘*Book 1*’ is to confront the self-defeating consequences of this antipathy to *constraints*. In it emphasis is placed on the *feel-system* and its impressive capacity for the *visual-sensing* of relativities of length, angle and curvature. For those interested in *accuracy* in drawing from observation, this can be justified in terms of practicality alone. However, for many, the main attraction is its potential for developing *expressive mark-making*.

Is this hope realistic? Can the emotional charge with which a line is drawn be communicated to those who look at the result? What answer should be given to this fundamental question?

As a means of introducing some of the factors that need bearing in mind, consider the case of making a drawing human model. It is hardly necessary to point out that images of human beings have loomed large in the history of art. Nor is it hard to find a reason for their abundance. Surely, nobody would deny that members our own species have the capacity to engender in us many of the most profound and potent feelings of which we are capable. It is hardly surprising that many artists have wanted to reflecting these. Their problem has always been how best to set about their task.

### **Bringing in the emotions**

Imagine drawing a female nude model. Your response to her body would surely differ according to whether you happen to be a man or a woman. For arguments sake let us take the example of a man making a drawing of a woman whom he finds sexually attractive. If so, his feelings would hardly be the same if this were not to be the case. His reaction would also vary according to whether he is working in a studio, containing other people, as opposed to being alone in a private room.

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14 Such as those described in Chapter 2: “*Established practices*”.

15 Including all those described Chapter 9: “*Artistic practices*”

If he is a student in a drawing class, the teacher might encourage him to empathise with the model's experience of holding onto the same pose for an extended period of time. Adopting this strategy might lead him to a large variety of perceptions relating to the model's state of mind. He might perceive her as contentedly self absorbed and at ease with her body, as being fidgety or as being unnaturally exposed, embarrassed, etc.. She might give the impression of being indifferent or friendly towards him.

At the suggestion of the teacher, he might try adopting the model's pose himself so as to sense within himself the weights, tensions and relaxations occurring in different parts of her body. This might lead him to consider the effects of the stresses these have been undergoing as a result of keeping still for an unnaturally long period of time? He might try to discern something of her inner experience from her comportment or her facial expression. Could the set of her mouth tell him anything? Do her eyes betray her thoughts and, if so, what is the visible evidence that gives them away? Can this be found by looking at the defining characteristics of the eyes alone or is it necessary to look beyond them? For example, does the slope of her shoulders help interpretations of facial expressions?

Perceptions of these kinds and many more could influence the dynamics of the artist's drawing. For example, they could effect the intensity (gentleness, force, etc.) and the character (thickness, thinness, hardness, softness, etc.) of his line production. They could also influence the selection of emphases, the inclusions and omissions, etc.. The nature of his feelings could also be responsible for the size of the image and its placement on the page.

In all probability, the artist would be affected by a number of other factors, including the degree of the model's nearness. As he draws her, he would surely react differently to different parts of her body. For example, being a man, he would be unlikely to feel the same about her feet or her hands as he does about her breasts or her thighs. Also his emotional state could be influenced by such factors as his capacity as a draughtsman, his artistic and personal objectives, his recent experiences, his longer term personal history, etc., etc..

Faced with the actual process of mark-making, various possibilities arise. For example, our artist might experience visual analysis and line-production as quasi-physical contacts with the object of his analysis and, therefore, for example, as covert caresses or other imaginary intrusions on the model's privacy. If so, this kind of perception could result in him drawing her either tenderly, with hesitant, sensitive lines or more positively, with confident, maybe even passion-

driven ones, etc. etc.. It would be surprising if, as the drawing progressed, he did not find thoughts and speculations arising in his mind. For example, as indicated by the story told in the previous chapter, Van Gogh believed that the child-bearing function of a woman's pelvis and hips should be emphasised and shocked his teacher and his fellow students by the degree of exaggeration which he felt necessary. Like him, our artist might have generalised ideas about the role or condition of women in society or he might find himself immersed in much more intimate ones, perhaps relating to selfish hopes or fears. There is no knowing what references, associations and connotations might rise up from his subconscious. However, whatever they might be, in every case, his musings could be reflected in the way he approaches or attacks the page with his drawing instrument.

Now, imagine a woman drawing the same model. It is hardly necessary to embark on another long list. Clearly, the fact of sharing the same gender would ensure that the reactions in many if not all the domains mentioned would be significantly different. And, this being the case, if the drawing is to reflect the feelings of the artist, it also will have to be different.

In summary, it is easy to imagine a multitude of ways in which feelings aroused by looking at a model could either affect or be reflected in the manner in which the pencil, pen or charcoal might be drawn: firmly across the paper, caressing it or attacking it with panache.

For examples showing four different approaches to drawing the same model see *Figures 29 - 32* in the Glossary at the end of this volume. But all drawings of all objects will be influenced by a multiplicity of factors. For example, Vincent van Gogh would have claimed that an analogous set of emotion related factors could influence the drawing of a chair.<sup>16</sup>

### **Are analytic looking and feeling incompatible?**

Though it is easy to talk about the artist's feelings in relation to an object they are drawing, in practice, maintaining immediacy of response can be a problem. If this is the case, it is because there are obstacles to surmount. For example, prolonged measuring activity of whatever kind will interfere with the directness of the relation between feeling-generating visual experiences and line-production.

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An even more fundamental problem concerns the nature of visual analysis

<sup>16</sup> See also "*Fresh Perspectives on Creativity*", *Chapter 10*, in the section with the subheading "Antonio Tapies" which elaborates on this possibility.

itself, since analytic looking involves focusing down on abstract-relation and, in the process, *isolating them from their context*. If so, we can only conclude that the essential tool for extending visual awareness can only too easily distance its users from the vitality of their both their subject-matter and their whole-context engendered feelings.

Does this mean that artists cannot combine analysis with feeling? If the answer to this question is sought exclusively within the framework of top-down analytic looking processes, the conclusion would have to be “yes”. However, this cannot be the case, for feeling-affected drawings abound.

If we look for an explanation, we find a plausible one in the fact that the brain routinely coordinates the activity of more than one of its processing systems. If so, it is no surprise to find that the *visual-analytic systems* and the *feel-systems* can work in tandem. Actually, they cannot do otherwise, since the *feel-systems* participates in the acquisition of all *action-instructions*, including those that guide *analytic-looking strategies*. The *feeling-based drawing lesson* proposed in earlier chapters is designed to help people to take advantage of this fact and, thereby, produce lines that are both well-observed and rich in feeling.

### Theory and practice

However, theory is one thing and practice another. Since analytic-looking is fundamental to extending visual awareness and, consequently, to creative-looking, artists need to find ways of avoiding the danger of distancing their analytic-looking strategies from their feelings. What might seem to be a huge theoretical difficulty relates to measuring the component parts of *abstract-relations*. This is because, by definition, the process of abstraction entails detachment from the object being drawn and, consequently, the feelings generated by it.

The approach to helping artist adopted in this book happens to have much in common with the one pioneered by Horace Lecoq de Boisbaudran 150 years ago. His core idea was the importance of training the memory, with its rich store of personalised, feeling-based associations with a view enabling these to influence line production. His method also favoured the systematic discovery and accumulation of information concerning the unique and, therefore, previously unknowable features of objects. Besides bringing feeling into the equation, these voyages into the unknown increase, not only the speed but also the efficiency of *information pick-up*.

One intrinsic snag is that the abundance of new unknowns to be discovered. As Degas put it in the quotation that I have used several times in this book, “*It is necessary to assume I know nothing for it is the only way to make progress*”.

Many illustrations can be found of artists working very hard to avail themselves of the expressive power of the rapidly picked up, brand new information:

- **Edouard Manet**, seeking the *effortless look*, often submitted his models to forty or more sittings. His hope seems to have been to complete his painting in one go, but he is said to have only once succeeded. Except on that occasion, every sitting consisted of a variably long sequence of “*failures*”, each of which had to be scraped down ready for another try. Evidently, as one sitting succeeded another, the artist could not but help become more and more familiar with the pertinent aspects of his sitter’s appearance and this familiarity would certainly have influenced the looking strategies he used subsequently.
- **Edgar Degas** is well known for producing a multiplicity of studies. He used these to build up a knowledge-base which enabled him to complete his main painting with the freedom and the expressiveness of mark-making to which he aspired. He also liked to make several images based on the same pose, with each developing the knowledge-base that could be brought to bear on the next.
- As mentioned above, fellow students in the Antwerp Academy were astonished to see **Vincent Van Gogh** completing fifteen studies of the model while they were still labouring away on their first. In the Dutch artist’s view, “*one drawing study on its own does not give full satisfaction, but many of them, even if they come from different sources, mutually complete one another.*”
- After eighty (some say ninety) sittings, **Pablo Picasso** felt that he had failed to complete his portrait of Gertrude Stein. However, without realising it, during his struggles, he had got to know the features of the sitter’s face so well that, after a period of reflection and gestation, he was able to produce his rendering of it *from memory*.
- **Henri Matisse** asserted that, “*the artist takes from his surroundings everything that can nourish his internal vision, either directly, when the object he is drawing is to appear in his composition, or by analogy.*”

This last quotation extends the discussion which has up to now concentrated

almost exclusively on the depiction of people. However, as Matisse indicates and as everyone knows, it is by no means only human attributes that are capable of stimulating human feelings. We can be moved not only by animals, inanimate objects (with all their associations and connotations) and natural scenes, but also by dynamics engendered by abstract relations involving contour, colour, scale, etc..

**Paul Cézanne** was far from advocating cold objectivity when he made the statement, *“The painter paints, whether it be an apple or a face. Painting is only a pretext for play of lines and colours, nothing more”*. Quite the reverse. According to him *“painting from nature is not copying the object, it is realising one’s sensations.”* His advice was to *“look at the model and feel very exactly... and express oneself distinctly and with force.”* Clearly, this supremely passionate man was depending on his feel-system to reflect and convey the strength and meaningfulness to him of his responses to abstract relations.

Large numbers of other quotations can be found which show that Cézanne was far from the only artist of accepted stature who: rejected straightforward copying, emphasised feeling and responded with emotion to abstract relations.

- **Jean-Baptiste Siméon Chardin**, *“Did you say that one paints with colours? Not at all, one merely uses colours. One paints with feeling.”*
- **John Constable**, *“Drawing is just another word for feeling.”*
- **Thomas Couture** (teacher of Edouard Manet), *“Inferior artists fail to respond passionately to nature and merely follow it like a child tracing a picture.”*
- **Claude Monet**, *“I want to succeed in expressing what I feel.”*
- **Edgar Degas**, *“Drawing is not shapes, it is one’s feelings.”*
- **Vincent Van Gogh**, *“I would like to be able to draw more freely and with more exaggeration.”*
- **Henri Matisse**, *“Exactitude is not the truth”* and *“I cannot copy nature in a servile way; I am forced to interpret it and submit to the spirit of the picture.”*
- **Pierre Bonnard**, *“Drawing is sensation. You can take any liberty with line, with form, with proportions, with colours, in order that the feeling is intelligible”*.

Readers may have noticed that the earlier description of factors influencing the artist when drawing a nude model did not include responses to abstract

relations. A start to rectifying this omission can be made by imagining making an outline drawing of her as a person. However, instead of (a) conceiving the contours of her body as personalised form-defining, rich with associations and connotations, (b) consider them as boundaries between a *continuously varying sequence of colour contrasts* (to do so it will help to *shut one eye*, so as to block the operation of *stereopsis*).

Sometimes these may be great, as for instance when blacks are juxtaposed to whites or reds to greens. Sometimes they may be subtle as when any colour is contrasted with another colour that is similar but to a small extent different with respect to its particular combination of hue, saturation or lightness. No matter what the degree of difference, there will always be a corresponding dynamic. Imagine line-production reflecting these: the strongest lines for the biggest differences and the most subtle ones for the smallest. To reflect these dynamics through their mark making, artists would have to be constantly changing pressure on the drawing instrument. As a result they would find themselves producing an enormous variety of different line characteristics. Inevitably the differences between them, whether they be large or almost imperceptible, will be sensed as *transitions*. Similarly, if we allow our gaze to wander between separated lines, our experience can be compared to the listening to the transitions that takes place *between different notes of music*.

Another approach to generating linear-dynamics is to move the eyes across the body between separated sections so contour. In this way it is possible to compare a number of curvatures, situated at varying distances and orientations relative to each other. Once again the movement from one to another will be experienced as *transitions* and, as before, these can be compared to the transitions that takes place between different notes of music. Indeed, they could be sensed as an accumulation of rhythmic movements, as in a dance. Matisse used the term “*arabesques*” to characterise assemblages of rhythmic lines that for him had something of this musical quality.

### **Line as colour**

As just indicated, the visibility of edges in nature is always related to the degree of local colour contrast, which in turn is related to the hardness or softness of edges. Because of the huge number of different colours in nature and the infinite variations within them due to effects of light and the variety of edge types (particularly in relation to shadows), it is safe to assume that every degree of con-



trast in nature is different to every other degree of contrast. Accordingly it seems appropriate to characterise drawings that show sensitivity to this virtually infinite variation, as the creations of colourists. There is also a more prosaic reason for coming to the same conclusion. According to classical colour theory, all colours can be described in terms of the three variables, hue, saturation and lightness and any change in any one of the three results in a change in colour. Accordingly all variations in line intensity or texture<sup>17</sup> can be described as changes in colour.<sup>18</sup>

Looking at matters in this way makes a bridge between linear drawing, shaded drawing and full colour paintings. It also allows us to extend the analogy with music for once colour is brought into the equation, it is easy to see how artists might experience nature in terms of “*symphonies*” of line, colour and texture. Again we have many quotations that give support to this possibility.

- **Paul Gauguin**, *“My simple object, which I take from daily life or nature, is merely a pretext, which helps me by means of a definite arrangement of lines and colours to create symphonies or harmonies. They have no counterparts at all in reality, in the vulgar sense of the word. They do not give direct expression to any idea, their only purpose being to stimulate the imagination - simply by that mysterious affinity which exists between certain arrangements of colours and lines in our minds.”*
- **Vincent Van Gogh**, speaking of a particular colour in a painting which had greatly excited him: *“it is colour not locally true from the point of view of a delusive realist, but colour suggesting some emotion of an ardent temperament... if you make the colours exact or the drawing exact, it won't give you sensations like that.”*
- **Pierre Bonnard**, *“relaxed lines, sober lines, turbulent lines, oscillating lines, solid lines...”*
- **Henri Matisse**, *“Colours and lines are forces and the secret of creation lies in the play and balance of these forces”* and *“It is necessary that the various marks I use be balanced so that they do not destroy each other. To do this I must organise my ideas; the relationship between the tones must be such that it will sustain, not destroy them”*. He also wrote that *“Expression for me does not reside in passions glowing in a human face or manifested by violent movement. The entire arrangement of the*

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17 In this context, texture can be equated with saturation.

18 See “*Painting with Colour*” for a full neurophysiological explanation of why achromatic drawings should be considered as colour drawings.

*picture is expression.”*

These insights into artistic sensibility expand the debate by calling attention to some of the elements which the quoted-artists felt they needed to modify, juggle, add to or expunge in the interests of pictorial coherence. It will be noticed that *all of them, though makers of figurative paintings, speak only of abstract qualities.*

### **Another level of feeling**

Two other quotations take the discussion further.

- Henri Matisse, “*I might be satisfied with a work done in one sitting, but I would soon tire of it: therefore, I prefer to rework it so that, later, I may recognise it as representative of my state of mind*”
- Paul Cézanne, “*An intellect with a powerful ability to organise represents the most precious collaboration a sensibility can have in its efforts to realise a work of art.*”

Clearly, neither artist felt that they could leave expression to feeling-generated mark-making alone. The work in one sitting was only a starting point. It was no more than a catalyst to further adventures into the unknown that were to be guided by a combination of intellect and feeling. A painting or drawing was only considered to be complete when the elements on the picture surface (image and colour) could be brought together in a way that satisfied some difficult-to-express internal feeling-related criteria of the artist concerned.

### **Implications**

*Except in this chapter and the concluding chapter of “Drawing with Feeling” the ideas presented in the two books dedicated to line drawing do not take us much beyond what Matisse described (in the quotation above) as the invariably disappointing effort produced in the first sitting. They have focused almost exclusively on what might be described as the data-gathering stage, as mediated by the accuracy aspiration. However, the sayings of artists quoted above remind us that sooner or later the newly acquired information must be brought together into coherent unities. Amongst other things it is necessary for artists to consider the organisation of the picture-surface as a whole, whether in terms of figurative or abstract elements and to find ways of combining them that satisfy both their feelings and their intellects.*

*The ideas about accuracy and inaccuracy presented in this chapter and throughout the two books on drawing suggest a consideration of three points. All of these are relevant to issues raised in the volumes on colour and creativity and all contain paradoxes depending on alternative definitions of the word “accuracy.” They are that:*

- *What most people suppose to be accuracy is seldom if ever accurate.*
- *Inaccuracy in terms of one framework of reference can mean accuracy in relation to another and visa versa.*
- *Feelings can only be expressed accurately through inaccuracy, whether revealed by inclusions and exclusions, by exaggeration or by other means of obtaining differences in emphasis.*

*It is these areas, so fraught with ambiguity and paradox, that have been so creatively explored, not only by the artists cited above and many of their contemporaries but also their successors within the Modernist movement, right up to the present day.*