

## Master Scholar – Sir Ernst Gombrich – at ninety

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### Editorial

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#### Master Scholar--Sir Ernst Gombrich--at ninety

On the 30th of March this year Professor Sir Ernst Gombrich achieved the age of 90. This marks a life of extraordinary achievement recognised with honours that no-one would question as fully deserved. With a knighthood, a dozen Honorary Degrees from major universities around the world, umpteen medals, and the highest honour of his adopted land--the Order of Merit--Ernst Gombrich is indeed Master Scholar of the highest distinction. He has explored the mysterious links between perception and art--adding to both in the process, with a score of superb books on the history and philosophy of art. As Director of the Warburg Institute and Professor of the History of the Classical Tradition in the University of London (1959--1976), he introduced generations of students to new ways of thinking about the classical tradition of Western art, and taught to see and think about how we see. I was privileged to work with him on a major exhibition in London (1973), at the Institute of Contemporary Arts (the ICA) which was initiated by Sir Roland Penrose: *Illusion in Nature and Art*. It is our privilege that Professor Gombrich is a member of the editorial board of *Perception*.

His most accessible books which capture these two aspects of his work are *The Story of Art* (1950) and *Art and Illusion* (1960). Both have exceptionally well balanced text and pictures. It is the second that I propose to discuss here; but its riches can only be appreciated by careful reading, more than once.

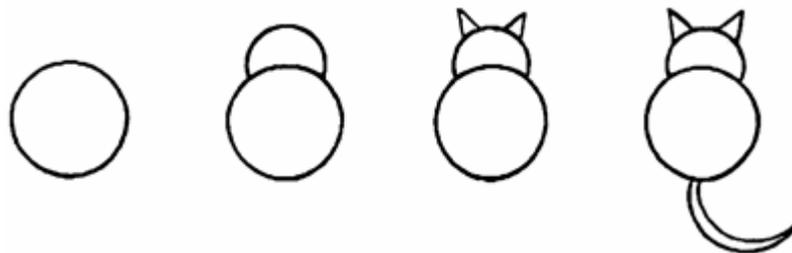
This book is based on seven A W Mellon Lectures in Fine Arts, presented at the National Gallery in Washington, in the Spring of 1956, entitled: ``The visible world and the language of art." The aim was to develop the basic idea of the earlier book, *The Story of Art*, which examines the: ``Development of representation from the conceptual methods of the primitives and the Egyptians, who relied on `what they knew', to the achievements of the impressionists, who succeeded in recording `what they saw'". A general conclusion is that no artist can ``paint what he sees". This follows from a view of perception itself, as creative constructions of inner representations of reality. This can go over the top in art. It is suggested that the impressionist programme was self-contradictory, contributing to the collapse of representation in twentieth century art.

The original seven lectures are arranged with additions into four sections: The Limits of Likeness; Function and Form; The Beholder's Share; Invention and Discovery. It starts with the question: ``Why is it that different ages and different nations have represented the visible world in such different ways?" This is an exciting question which takes the reader through adventurous journeys in the history of art and the psychology of perception. Social factors are not absent: ``If art were only, or mainly, an expression of personal vision, there would be no history of art".

Illusions are introduced early on (page 4): the duck--rabbit and a mirror illusion. This is the surprising fact that one's image on a mirror is half the size of one's head. So the first is psychological

but the second physical, or more specifically optical. Gombrich says of both, and indeed of all, illusions that: "We may be intellectually aware of the fact that any given experience *must* be an illusion, we cannot, strictly speaking, watch ourselves having an illusion". I am not entirely sure of this, or may have missed the point. Is it saying that, though conceptions and perceptions can be different, we cannot be aware of this difference at one time? This is surely true of alternative perceptions--including seeing either the brush strokes or the picture, but not both at once--but one does *see* the Sun sinking to the horizon though one *knows* the horizon is moving up to the Sun as the Earth rotates. Isn't one both experiencing and recognising an illusion here? Or is this not a fair example?

The power and magic of image making was not initially revealed to Ernst Gombrich by a great painting--by a Velázquez--but rather by a child's drawing game for representing a cat. A circle representing a loaf of bread was transformed into a shopping bag, by adding a curve at the top; two squiggles on its handle shrunk it into a purse; another squiggle for the tail--and here is the cat. "What intrigued me, as I learned of the trick, was the power of metamorphosis: the tail destroyed the purse and created the cat; you cannot see one without obliterating the other. Far as we are from completely understanding this process, how can we hope to approach Velázquez?" This lesson from childhood seems to have set the scene for his mature thinking. Such construction kits (as they might be called) are used very differently by individual artists, who are lost without appropriate kits for their subject; so artists have to specialise on fairly limited themes, for which they have learned how to construct representations. Throughout, the importance of constructing perceptions, and ways of representing, is stressed as fundamental for seeing and painting. There are *styles* of painting, perhaps also styles of seeing.



How to draw a cat

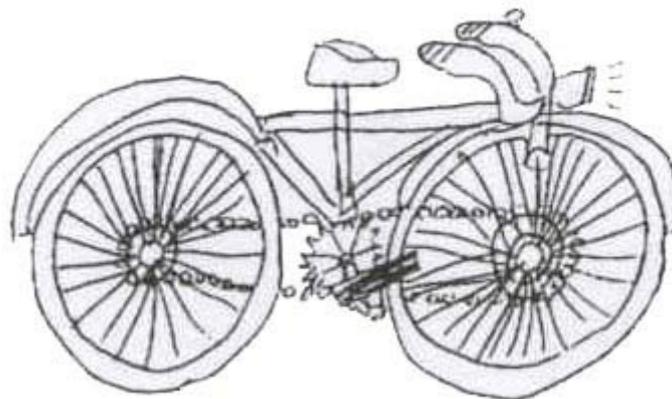
Memory is not neglected. The amateur painter, Winston Churchill, is quoted tellingly (page 34). Churchill says: "It would be interesting if some real authority investigated carefully the part which memory plays in painting. We look at the object with an intense regard, then at the palette, and thirdly at the canvas. The canvas receives a message dispatched usually a few seconds before from the natural object. But it has come through a post office *en route*. It has been transmitted in code. It has been turned from light into paint. It reaches the canvas a cryptogram. Not until it has been placed in its correct relation to everything else that is on the canvas can it be deciphered, its meaning apparent, is it translated once again from mere pigment into light. And the light this time is not of Nature but of Art." This is an implied criticism of vision research which still holds, for surely we do not think enough about the roles of long-term and short-term memory in perception.

For Gombrich, nothing illustrates the code representations of form better than classical mosaics: "Graded tones of tesserae will suffice for the mosaicists of classical antiquity to suggest the basic relationships of form in space .... They exemplify the relational cryptograms which remained in use throughout Western art, the contrast of figure and ground on the one hand and, within the figure, the modification of 'local colour' through the simple 'more' or 'less' of light." This leads to advice for

galleries: ``... relationships matter in art not only within any given painting but also between paintings as they are hung or as they are seen". It is important that paintings can enhance or, especially when styles conflict, destroy each other.

The psychologist Sir Frederic Bartlett's repeated copying of simple figures is discussed (page 64), with effects of classifications, which may be different for seeing and representing. Perhaps we still do not know enough of this. It must be important for testimony, as well as for the artist who returns again and again to his picture, his palette, and the scene before him. How do they change in the mind with repeated viewing, perhaps over many months? Gombrich's observations on how newly discovered animals were portrayed before photography is among the most famous of his investigations. Thus (page 70) of Dürer's woodcut of a rhinoceros, based on second-hand evidence: ``This half-invented creature served as a model for all renderings of the rhinoceros, even in natural-history books, up to the eighteenth century." This extends to anatomy, even to Leonardo's anatomical drawings, which were sometimes distorted by incorrect ideas of Gallen. A theme of the book throughout is how artists create from individual yet also socially formed schema which they develop and mould through their careers. Here concepts of psychology and art fuse in the mystery of creativity.

How much does drawing depend on conceptual understanding? Many years ago I attended a seminar on effects of brain damage, and one of the tests was getting patients to draw a bicycle from memory. Patients' drawings were passed around, by the neuropsychologists attending the seminar. The patients' drawings were hopeless--disconnected wheels, the chain in the wrong place--totally unrideable. On the spur of the moment I asked the psychologists present to draw a bicycle from memory. Most of their drawings were almost indistinguishable from the brain-damage drawings! Here is an example, from a rerun of this experiment, from a normal bicycle-riding Danish student. Evidently one has to reinvent the bicycle to draw it.



A 'normal' drawing of a bicycle.

The chain on the front wheel is impossible: How would it steer?

I am not sure what Professor Gombrich thinks about this. Is it lack of a perceptual construction kit? How much conceptual understanding is needed for seeing and drawing? Let's ask him. Perhaps he will tell us, in these pages.

The history of art is rich with inventions and discoveries. The most obvious is the geometrical perspective of Brunelleschi, which now we see every day in photographs, but there are many others.

Gombrich goes so far as to say (page 279): "... the discovery of appearances was due not so much to a careful observation of nature as to the invention of pictorial effects". Putting perspective in its place, he adds: "... we can perhaps rid art history of its obsession with space and bring other achievements into focus, the suggestion of light and texture, for instance, or the mastery of physiognomic expression". All these needed experiment, by trial and error. Thus, Rembrandt discovered how to omit detail yet convey sparkling gold braid. Indeed highlights come to the aid of painters, and rescue inadequate execution from obvious deficiencies in representing form, perhaps because: "We instinctively feel that glitter means, if not gold, at least smoothness, brightness, a sensual quality to which we respond with greater immediacy than we respond to outline and which is therefore less analysed."

Hardest, is representing facial expressions. Here Gombrich looks at caricature: "... how could Disney have enchanted us if he and his team had not probed into the secret of expression and physiognomy that allowed them to perform that true magic of animation that created a Mickey Mouse, a Donald Duck, a Dumbo, even before animation through movement began?" Two conditions are suggested for this illusion of life, without illusion of reality: generations of experience of artists with the effect of pictures; and the willingness of the public to accept the grotesque and the simplified, as lack of elaboration avoids contradictory clues--so the beholder can supplement what the artist omits. This is related to the seeing of faces in ink blots. Also, innate releasers may be important; though, as Alberti said in *Della Pittura*, it is hard for painters to distinguish between laughing and weeping. To discover further insights on caricature and so much more the book itself must be read! But let's end here with hints of illusion.

Illusion in art is taken back to Plato's well known complaint of the painted couch in the *Republic*: "Does a couch differ from itself according to how you view it from the side or the front or in any other way? Or does it differ not at all in fact though it appears different ...?" Plato condemns the artist as a maker of phantoms. Indeed, as Plato saw the visible world as inevitable chimera, he might have condemned all artists as deliberate falsifiers! But this depends on what we expect to get from pictures; on what is being represented (form? intention? mood?) and how we respond. So illusion--misleading deviation from truth--is not an absolute concept. On a broad canvas we see that what misleads depends on individual responses, needs, and expectations. So the same situation or phenomenon may or may not be illusion. Perhaps this is why as he once told me, he rather regretted the word 'illusion' in the title *Illusion and Art* of this truly articulate book.

Professor Gombrich can be intimidating. As I soon discovered while working with him on the ICA exhibition, he does not suffer fools gladly. For a 90th birthday present, may I offer a donnish though far too trivial pun, more or less. To be said rather than read: "What is a moron? A student who can't understand a lesson."

We would be moronic to forget the lessons Professor Sir Ernst Gombrich has taught his students and us.

Richard Gregory

## References

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