'Making precedes matching': with this famous formula, the epitome of his Art and Illusion (1960), 1 Ernst Gombrich proposed that artists, before they ever dream of copying what they see before them, make pictures by manipulating inherited 'schemata' that designate reality by force of convention. At some point an artist compares a pictorial schema to direct observation of the world, and on that basis presumes to correct the schema. This then enters the stock of available formulae until some later artist holds it up to the world and ventures a further adjustment. In this way art may come to have a history. Beholders, in turn, make their own sense of pictures by collating what they see on the canvas with what they know about the world and with what they remember of other pictures.

Gombrich’s account of the making of art as an experimental and even improvisational process impressed many readers beyond the academic discipline of art history. However, for two decades or more, many art historians have considered his name associated. A forceful blow to Gombrich’s reputation was struck by Norman Bryson in his Vision and Painting: The Logic of the Gaze (1983), an intricately reasoned critique of the quest for an ‘Essential Copy’ that has supposedly driven Western art and art theory since Antiquity. Bryson argued that the picture, as a conventional sign, delivers not reality but only a coded message about reality and that verisimilitude is nothing more than ‘rhetoric’ that persuades the unwary viewer that he or she is seeing things as they really are. Within the discipline of art history, for at least a decade, Bryson’s polemic was highly influential. His anti-naturalism was embraced by art historians who wished to modernise their discipline, bringing it into step with the development of critical theory and poststructuralism that by the 1980s had already profoundly reshaped literary studies.

The problem-solving model of the development of Western art that Art and Illusion proposed left Gombrich, in Bryson’s view, aligned with an unacceptable classical theory of representation: ‘so far from questioning the Whig optimism of that version, it in fact reinforces its evolutionary and teleological drive’. 2 After Bryson, one could almost be forgiven for thinking that the phrase ‘Essential Copy’, implying an endpoint to the process of experimentation, was Gombrich’s, which it was not. Yet only a decade later Keith Moxey presented Gombrich as ‘the most eloquent advocate’ of the ‘resemblance theory of representation’, according to which ‘representation has something to do with the imitation of nature’. Moxey then contrasted this view with that of the philosopher Nelson Goodman, numbering him among ‘Gombrich’s critics’, who ‘pointed out that [...] a picture never resembles anything so much as another picture’. 3 A reader who turns to Goodman’s book Languages of Art for further elucidation, however, will be surprised to find that the author mentions Gombrich not as his intellectual antagonist, but rather as a principal witness in his own conventionalist cause: ‘Gombrich, in particular, has amassed overwhelming evidence to show how the way we see and depict depends on and varies with experience, practice, interests, and attitudes’. 4

In Art and Illusion Gombrich makes a powerful case against what Ruskin called the ‘innocence of the eye’ (p.296). Perception, in Gombrich’s account, is not a given but a learned practice, involving an active construction of the world. Resemblance to reality is an effect generated by the interplay between the expected and the unexpected. Pictures are ‘relational models’ of reality (p.253). Pictorial realism was a historical and collective product, and hard-won. The artist is not free, but faces a limited array of choices (p.376). Cultures determine what is possible (p.86).

Such propositions inverted the conventional wisdom about representation. Like his near-exact contemporary, Claude Lévi-Strauss, Gombrich was a ‘reverse thinker’. Lévi-Strauss argued that myths are made by combining bits and pieces of previous myths. Meaning does not precede, but rather follows, the myth-maker’s bricolage. ‘Mythical thought [...] is imprisoned in the events and experiences which it never tires of ordering and re-ordering in its search to find them a meaning’. 5 Gombrich too solved problems by turning them inside out. For example, he pointed out that astrological associations do not explain character traits but create them: human nature adjusts itself, as it were, to fit the signs. 6

Gombrich’s paradoxical argument is also homologous with that of Thomas S. Kuhn, who in his The Structure of Scientific Revolutions (1962) described the paradigmatic, essentially social basis of scientific knowledge. Just as Kuhn’s demonstration of the collective and conventional nature of scientific knowledge was a

We are grateful to the Azam Foundation for sponsoring this article.


4 N. Goodman: Languages of Art, Indianapolis and Cambridge 1976, p.10. Gombrich played a similar role in Umberto Eco’s Theory of Semiotics, Bloomington 1976, pp.204-05, a classic treatise that makes the most extreme case possible for the conventionality of signs. Even iconic signs, or pictures, which would seem to be related to what they signify in stronger than conventional ways, figure in Eco’s analysis as the products of cultural convention. In making his case, Eco enlisted none other than Gombrich, citing his analysis of Constable’s recoding of the light effects in the English landscape in Wivenhoe Park (National Gallery of Art, Washington; 1816).
revelation for non-scientists, so too were non-art historians greatly impressed by Gombrich’s arguments. Kuhn stripped the scientific revolution of some of its aura by showing that scientists were driven by ambition and limited by force of habit. Gombrich, for his part, desanctified the contents of the great museums by showing how the painters, even as they were aiming at ideal form or expounding arguments, were also solving local, practical, technical problems. Yet art historians, already familiar with the conventions of pictorial representation, were not taken by surprise, for this is the basic premise of the modern discipline of art history, especially as it was formulated by the pioneering theorists and historians Konrad Fiedler, Heinrich Wölfflin and Alois Riegl. ‘People have at all times seen what they want to see’, said Wölfflin. Art and Illusion echoes and amplifies this dictum.

Further, Gombrich stands accused of reducing art to mere technology. Art, to an art historian, is self-evidently something made. The art historian is interested in the ways artists select and recombine, contrive and construct, perhaps even add to reality. To speak of artists striving to match their fabricated worlds to a real world is to render the making of art less a poetic activity and more a technology. Poesis or artistic creation, in many modern theories of art, is compromised if it submits to practical imperatives. Art-making, an activity no doubt less free than it pretends to be, is nevertheless taken to symbolise the freedom of the imagination. Technology, by contrast, is a problem-solving process and does not claim autonomy.

To a certain extent Gombrich invited this reading of his work by distancing himself, in repeated comments throughout the 1960s and 1970s, from the radical constructionist reading of Art and Illusion — from Umberto Eco and Nelson Goodman, in effect. Gombrich felt that their positions were unreasonable. He also courted the naturalist reading of his work by appearing to say that European painters got better and better at representing the ways things looked between the fifteenth and the nineteenth centuries.

This raised the possibility that Gombrich might believe that European art was better than non-European art. Emerging in the early nineteenth century, at a moment when medieval art was recovered for scholarship and when academic prejudices in favour of ideal beauty and measured proportions were under attack, the discipline has deep roots in a relativist mindset. The eye of the modern academic art historian, whether in search of the concrete links that connect the artefact to its fabricated world, to match their fabricated worlds to a real world is to render the making of art less a poetic activity and more a technology. Poesis or artistic creation, in many modern theories of art, is compromised if it submits to practical imperatives. Art-making, an activity no doubt less free than it pretends to be, is nevertheless taken to symbolise the freedom of the imagination. Technology, by contrast, is a problem-solving process and does not claim autonomy.

To a certain extent Gombrich invited this reading of his work by distancing himself, in repeated comments throughout the 1960s and 1970s, from the radical constructionist reading of Art and Illusion — from Umberto Eco and Nelson Goodman, in effect. Gombrich felt that their positions were unreasonable. He also courted the naturalist reading of his work by appearing to say that European painters got better and better at representing the ways things looked between the fifteenth and the nineteenth centuries.

This raised the possibility that Gombrich might believe that European art was better than non-European art. Emerging in the early nineteenth century, at a moment when medieval art was recovered for scholarship and when academic prejudices in favour of ideal beauty and measured proportions were under attack, the discipline has deep roots in a relativist mindset. The eye of the modern academic art historian, whether in search of the underlying principles of form that reveal the shape of history itself, or in search of the concrete links that connect the artefact to its fabricated world, to match their fabricated worlds to a real world is to render the making of art less a poetic activity and more a technology. Poesis or artistic creation, in many modern theories of art, is compromised if it submits to practical imperatives. Art-making, an activity no doubt less free than it pretends to be, is nevertheless taken to symbolise the freedom of the imagination. Technology, by contrast, is a problem-solving process and does not claim autonomy.

To a certain extent Gombrich invited this reading of his work by distancing himself, in repeated comments throughout the 1960s and 1970s, from the radical constructionist reading of Art and Illusion — from Umberto Eco and Nelson Goodman, in effect. Gombrich felt that their positions were unreasonable. He also courted the naturalist reading of his work by appearing to say that European painters got better and better at representing the ways things looked between the fifteenth and the nineteenth centuries.

This raised the possibility that Gombrich might believe that European art was better than non-European art. Emerging in the early nineteenth century, at a moment when medieval art was recovered for scholarship and when academic prejudices in favour of ideal beauty and measured proportions were under attack, the discipline has deep roots in a relativist mindset. The eye of the modern academic art historian, whether in search of the underlying principles of form that reveal the shape of history itself, or in search of the concrete links that connect the artefact to its fabricated world, to match their fabricated worlds to a real world is to render the making of art less a poetic activity and more a technology. Poesis or artistic creation, in many modern theories of art, is compromised if it submits to practical imperatives. Art-making, an activity no doubt less free than it pretends to be, is nevertheless taken to symbolise the freedom of the imagination. Technology, by contrast, is a problem-solving process and does not claim autonomy.

To a certain extent Gombrich invited this reading of his work by distancing himself, in repeated comments throughout the 1960s and 1970s, from the radical constructionist reading of Art and Illusion — from Umberto Eco and Nelson Goodman, in effect. Gombrich felt that their positions were unreasonable. He also courted the naturalist reading of his work by appearing to say that European painters got better and better at representing the ways things looked between the fifteenth and the nineteenth centuries.

This raised the possibility that Gombrich might believe that European art was better than non-European art. Emerging in the early nineteenth century, at a moment when medieval art was recovered for scholarship and when academic prejudices in favour of ideal beauty and measured proportions were under attack, the discipline has deep roots in a relativist mindset. The eye of the modern academic art historian, whether in search of the underlying principles of form that reveal the shape of history itself, or in search of the concrete links that connect the artefact to its fabricated world, to match their fabricated worlds to a real world is to render the making of art less a poetic activity and more a technology. Poesis or artistic creation, in many modern theories of art, is compromised if it submits to practical imperatives. Art-making, an activity no doubt less free than it pretends to be, is nevertheless taken to symbolise the freedom of the imagination. Technology, by contrast, is a problem-solving process and does not claim autonomy.

To a certain extent Gombrich invited this reading of his work by distancing himself, in repeated comments throughout the 1960s and 1970s, from the radical constructionist reading of Art and Illusion — from Umberto Eco and Nelson Goodman, in effect. Gombrich felt that their positions were unreasonable. He also courted the naturalist reading of his work by appearing to say that European painters got better and better at representing the ways things looked between the fifteenth and the nineteenth centuries.

This raised the possibility that Gombrich might believe that European art was better than non-European art. Emerging in the early nineteenth century, at a moment when medieval art was recovered for scholarship and when academic prejudices in favour of ideal beauty and measured proportions were under attack, the discipline has deep roots in a relativist mindset. The eye of the modern academic art historian, whether in search of the underlying principles of form that reveal the shape of history itself, or in search of the concrete links that connect the artefact to its fabricated world, to match their fabricated worlds to a real world is to render the making of art less a poetic activity and more a technology. Poesis or artistic creation, in many modern theories of art, is compromised if it submits to practical imperatives. Art-making, an activity no doubt less free than it pretends to be, is nevertheless taken to symbolise the freedom of the imagination. Technology, by contrast, is a problem-solving process and does not claim autonomy.
prints, optical illusions and scientific illustrations, indisputably prophesied the field of study that would later be called Bildwissenschaft in Germany, and in Britain and America ‘visual culture’. The student of visual culture, who may well harbour ambitions to liquidate the discipline of art history outright, believes that the study of images has been impeded by outmoded tastes for the fine arts, aesthetic experiences and the art of interpretation.

By identifying a problem-solving dynamic embedded within the history of the fine arts, Gombrich drew fire from two constituencies: on the one hand, those who believe that art historians should never tell the story of art as a story of progress, and on the other hand, those convinced that modern art does represent an advance on earlier art – not because it better renders how things appear, but because it proposes a new social order, captures the invisible structure of the cosmos or reflects on the nature of art itself.

To the latter charge, Gombrich pleaded guilty: he was sceptical of all avant-gardism. He reveals the sources of this view in his book-length interview with Didier Eribon, where he describes a lengthy unpublished manuscript on the subject of caricature, which he wrote together with Ernst Kris. The two authors saw caricature, which first appeared in European art only in the late sixteenth century, as a successor to the magical image, which in pre-modern times had been credited with the power to defame or even injure its subject. Caricature was only possible once people stopped believing that the image could work real harm. When the interviewer asked Gombrich whether he still held this theory, the art historian answered: ‘No, certainly not’. For Kris, like so many other modern thinkers, including Freud as well as Riegl and Aby Warburg, was ‘under the spell of an evolutionist theory, the art historian answered: ‘No, certainly not’. For Kris, like so many other modern thinkers, including Freud as well as Riegl and Aby Warburg, was ‘under the spell of an evolutionist theory of human history, imagined as a slow advance from primitive irrationality to the triumph of reason’. After the Second World War Gombrich felt it was simply no longer possible to believe optimistically in the inevitable refinement of the human spirit.12

Art historians, in Gombrich’s view, were simply unable to resist telling the story of art as a progressive dominance of spirit over matter. He associated this model with Hegel, but it has much older Christian roots. Gombrich was right that the dematerialisation of art is the basic plot structure of virtually all ambitious art history written since the nineteenth century, whether formalist, humanist, Marxist or poststructuralist in flavour; from Riegl, Wölfflin and Meyer Schapiro to T.J. Clark, Hubert Damisch and Rosalind Krauss. In this narrative, art begins by restaging a primal tactile or bodily relation to the world. At a later point art puts its trust in the sense of sight, offering the world as a picture. In this way the beholder is stabilised and put face to face with the work of art, preparing him or her either to enter into a virtual relation with the work, or to reflect on the work’s reflections on the conditions of its own possibility, including the beholder’s perceptual and cognitive participation; and so on ad infinitum. The story is retold with many nuanced variations. In Wölfflin’s scheme, the linear or tactile mode is succeeded by the painterly or optical mode; but the sequence of linear to painterly can also be repeated, as a kind of sub-routine, inside an overall painterly regime. In the twentieth century of Krauss, the optical mode is shadowed by the threat of a collapse back into the corporeal; the power of the drives and the senses to confound the reflective ambitions of art becomes the very theme of modern art. But in the end it is always the asymmetry between body and mind that gives the narrative its shape. This is the account of the discipline, more or less, offered by Michael Podro’s Critical Historians of Art (1982), a book that expressly excludes Gombrich.

Gombrich lost faith in reason as the basis for this narrative, and so turned to technology. Problem solving, as explicated in Art and Illusion, is a kind of externalised reason. Technology makes measurable progress and yet does not depend on human virtue, only competence. Gombrich was not saying that art, in the end, turns out to be nothing other than a technology. He was only saying that if you are interested in telling the story of art as a story, with a plot, and if you are interested in showing that art registers the progressive domination of mind over matter, then you had better narrow your field of vision and focus only on those episodes in the history of art when artists were trying to render the look of things.

Although he was aversive to avant-garde art, Gombrich’s theories of the production and reception of art developed in Art and Illusion can easily be extended beyond representational art to abstract art and indeed any art. Podro, in his book Depiction (1998), saw no barrier to extending Gombrich’s account of the art of painting as a reflection on the conditions of perception – on the realisation of the subject through recognition, in Podro’s terms – beyond the horizon of illusionistic painting. ‘It would be hard to conceive of a practice of this kind [Mondrian’s abstractions] – this play of variations – without the cultivation of formal relations in earlier depiction, without familiarity with the consistencies of morphology that run through discrete objects and the re-vision of one feature through another’. The process is structured as a feedback loop: ‘recognition sustained and developed itself through recruitment of its own material and psychological conditions to make itself more replie’.13 The ‘depiction’ phase of art history, which has the merit of revealing clearly the structure of the game, now appears to have been a limited episode. Not only the ‘look of things’, but also the hidden essence of things, can be modelled, schematised, corrected. Some artists seem to do nothing but make and make, never bothering to match. In fact, they are comparing what they make to a conception of reality they find somewhere inside themselves.

We are not dealing with ‘progress’ here, but rather with an emergent process that seems, from the inside, to have a structure even if it is not at first clear where it is headed. It is like learning – not mastery of a skill, but learning as the growth of a deep familiarity with a subject or a problem. Learning is a convergent process that nevertheless has no endpoint. We may feel that we are learning more and more and yet, paradoxically, have no idea what it might be like to have learned everything, to have nothing more to learn. And this, I believe, is the nature of the process that Gombrich was describing. European art has at times appeared – even and especially to the artists themselves – to be a convergent process and yet no one has ever imagined that art would one day achieve its ends and cease to change.

12 Ibid., pp.51–53.
In the last chapter of *Art and Illusion*, Gombrich wonders how art, if it is just a technology for simulating optical impressions, manages to amount to anything at all. In fact, he never once lost his sense of what art is and why it is significant, even as he denied himself any facile satisfaction in art. Like his teacher, Schlosser, who held an ineffable Crocean conception of art, Gombrich, in his scholarship, tends to evade the question. He gives us glimpses of his view of art only in gnomic comments, typically in the closing pages of his essays, for instance at the end of "Raphael’s ‘Stanza della Segnatura’", where the painter is credited with transforming humanistic commonplaces into a beautiful and complex composition that gives the impression of 'an inexhaustible plenitude'. Gombrich adds, and one wishes he had said just a little more on the topic: ‘This plenitude is no illusion’.  

Such comments, which hint at a positive aesthetic, are rare. Gombrich understood that under the altered conditions of modernity, any theory of art has to be routed through a theory of the image, a *Bildewissenschaft*. Nevertheless his dramatic account of the dialectical honing of representational algorithms across time conjures up brief, mirage-like visions of an art that finally shows us what life is like. The possibility of such an art had been explained away by a century of art-historical scholarship – a secular science. Gombrich, true to his Viennese training, demonstrated once more the paradoxical dependence of the image on formulae and improvised solutions. Yet in the end Gombrich cannot disguise his excitement about the image that manages somehow to seize the real. That image shines through *Art and Illusion*’s screen of explanations. Non-art historians did not perceive this shining through of reality, for they were more interested in the argument about the conventionality of pictorial representation, which was new to them. But some art historians did, and that is why they held Gombrich’s book at arm’s length. Norman Bryson, when he called for a systematic semiotics of the image, was only telling art historians what they already wanted to hear: that the image of the true image is too threatening, that it must be exorcised, that it will drag us back to religion.  

In the third chapter of *Art and Illusion*, ‘Pygmalion’s Power’, Gombrich places his story within the long-term context of the myth of the image or artefact that comes to life. He assigned the dream of ‘rivaling creation itself’ (p.91) to an ‘archaic’ phase when images were thought by virtue of their lifelikeness to wield magical power. The impression of lifelikeness was created, not strictly by resemblance, but by efficacy within a context of action, a ritual or a game. But the threats to orthodox religion and to reason posed by magic and by ritual are worries that Gombrich understood that under the altered conditions of modernity, any theory of art has to be routed through a theory of the image, a *Bildewissenschaft*. Nevertheless his dramatic account of the dialectical honing of representational algorithms across time conjures up brief, mirage-like visions of an art that finally shows us what life is like. The possibility of such an art had been explained away by a century of art-historical scholarship – a secular science. Gombrich, true to his Viennese training, demonstrated once more the paradoxical dependence of the image on formulae and improvised solutions. Yet in the end Gombrich cannot disguise his excitement about the image that manages somehow to seize the real. That image shines through *Art and Illusion*’s screen of explanations. Non-art historians did not perceive this shining through of reality, for they were more interested in the argument about the conventionality of pictorial representation, which was new to them. But some art historians did, and that is why they held Gombrich’s book at arm’s length. Norman Bryson, when he called for a systematic semiotics of the image, was only telling art historians what they already wanted to hear: that the image of the true image is too threatening, that it must be exorcised, that it will drag us back to religion.  

In the third chapter of *Art and Illusion*, ‘Pygmalion’s Power’, Gombrich places his story within the long-term context of the myth of the image or artefact that comes to life. He assigned the dream of ‘rivaling creation itself’ (p.91) to an ‘archaic’ phase when images were thought by virtue of their lifelikeness to wield magical power. The impression of lifelikeness was created, not strictly by resemblance, but by efficacy within a context of action, a ritual or a game. But the threats to orthodox religion and to reason posed by magic and by ritual are worries that Gombrich inherited from ‘Christianity’ and the ‘Enlightenment’, respectively. In assigning the confusion of art and life to a primitive stage in human history, he accepted the very evolutionary model of human nature that he had reproached Freud and Warburg for holding. In fact, art’s possessive relationship to life has by no means diminished in arid. In modernity it simply takes different forms.  

*Techne*, the Greek word for art, is what man adds to nature. The ultimate aim of techne – the challenge – is the generation of life out of non-life. At that point, art would come to an end because man becomes nature. Art never quite lost sight of that self-annihilating goal.  

Many artists in the late 1950s and early 1960s, impatient with the pieties surrounding painterly abstraction, were emboldened to turn to the illusion-generating technologies. These were the years of video art, multimedia performances, Fluxus, Structural film; the years of the introduction of photography into conceptual practice; not to mention photorealism in painting. Like the old masters, whose obsessions with perspective or light effects Gombrich chronicled, these artists found no contradiction between control over representational technologies and the project of delivering the world a second time in order to make it strange; to make art, in other words. *Art and Illusion* is more easily contextualised within a history of modern art than within a history of modern art history.  

Today, half a century after the book’s publication, the moving image, the animated image, the interactive image, the moving body, the machine, the flow of information itself have all become basic components of artistic production. The stagings and restagings that have structured art since the late 1950s, from Fluxus to Happenings, from performance art and installation art to the art of relation and participation, might well be understood as reinsertions of creativity into ‘contexts of action’, rituals and games, with the aim of collapsing reflective distance and reinvesting the work of art with life. This project looms once again as the vanishing point of art. Illusion reaffirms the body as the central preoccupation of art. The body generates perceptions and memories which it then imitates by fabricating images beyond its own boundaries, such as paintings or films. The illusion is nothing other than an external image that has come to resemble very closely an internal image, thus seemingly abolishing the boundary of the body. The body merges with its environment and so postpones annihilation.  

The fusion of techne with life as envisaged by the artist is less sensational but no less real than the artificial life hypothesised today in the robotics or the biology laboratory. Gombrich seemed aware in 1956 that he was standing at the brink of a completely new era, in art as much as in science, but was unable to peer over the edge. In *Art and Illusion* he found nevertheless a way to remind us that art is most art-like when it imagines what it would be like not to be art.  

---

1. Compare the reference by Bryson to a “generally held, vague, common-sense conception of the image as the resurrection of Life”; Bryson: op. cit. (note 2), p.3. I am not sure that common sense does conceive of the image in this way, but if it does, then this is the most interesting remark Bryson makes in *Vision and Painting*.  

---

The Burlington Magazine - CL - December 2009