FORM OF THOUGHT AND PRESENTATIONAL GESTURE IN KARL POPPER AND E. H. GOMBRICH

DOI: 10.2478/v10023-009-0038-4

NORBERT SCHNEIDER

Abstract: The paper deals with common elements and differences in Popper and Gombrich, especially concerning their forms of thought and presentational gesture. Among others it considers the model of common sense which was basal for both of them as well as the similarities of searchlight theory (Popper) and some postulates of Gestalt psychology (Gombrich). At the end it analyses their approaches to historiography with special focusing on Gombrich's comments on the concept of social history of art.

Keywords: criterion of simplicity; searchlight theory; compositional schemas; Viennese School; social history of art.

Criterion of Simplicity and Common Sense

In their writings, Ernst Gombrich and Karl Popper repeatedly emphasized the ties of friendship linking them and their indebtedness to each other. Common factors in their backgrounds were their origins in Vienna; their upbringing in an educated upper-class home with Jewish parents—both of their fathers were lawyers; and a love of music learned from other family members—they both played (as pianists) throughout their lives to a very high standard, according to reports. They also shared—the topic that will be concerning us here—a related methodological basis, as they themselves frequently stressed. This affinity between them in the field of the theory of science can also ultimately be traced back to the way in which their mental worlds were shaped in the intellectual milieu of the Vienna of the 1920s and early 1930s. They shared patterns of thought which, after their enforced emigration to England, they were both evidently able to assimilate effortlessly to the philosophical models predominating there.

The quintessence of these patterns of thought was the criterion of simplicity (on this topic, see Popper 1963; cited with reference to the theory of the criterion of simplicity developed in it in Gombrich 1960, 231), borrowed from the natural sciences and mathematics. It is a criterion that is already found in Ernst Mach, who taught philosophy at the University of Vienna beginning in 1895. Claims for the validity of the criterion in the theory of science were similarly made in the philosophy of empirio-criticism developed by Richard Avenarius, subsumed under the category of the principle of economy (cf. Schneider 2006, 31-32). A radical rejection of any idealistically shaded metaphysics was a constitutive element in such conceptions, so that they represented a turn towards an experience-oriented view based only on "what is found", what is immediately given.

As is well known, the Vienna Circle founded by Moritz Schlick (Herbert Feigl, Rudolf Carnap, Friedrich Waismann, Viktor Kraft, Kurt Gödel and many others) also drew on the empirio-critical approach. Karl Popper had initially been close to the Vienna Circle, despite his vehement rejection of the principle of verification propounded by the group. As a result of emigration, the theory of logical positivism was undergoing internationalization and exportation to the Anglo-American world—particularly through Herbert Feigl (cf. Feigl 1981, 57–94), whose influence was explicitly acknowledged by A.J. Ayer (1936). Popper in turn forged links with the earlier British philosophy of the eighteenth and nineteenth centuries, principally David Hume (cf. Hume [1751] 1998) and Thomas Reid ([1764] 1997). It was the latter who wrote the classic statement, "Common sense is that degree of judgement which is common to men with whom we can converse and transact business" (Reid [1785] 2002).

For Popper, the ultimate motivation for this recourse to "common sense" theory was a moral or perhaps political one. It was certainly closely related to his political commitment, which he had already developed as a boy when he came into contact with groups of Monists and Marxists. For a time, he was a member of the Association of Socialist Secondary-School Pupils [Vereinigung sozialistischer Mittelschüler], and in 1919 he became a Communist. Although he was later a fierce opponent of Marxism and socialism, as an apostate—particularly in The Open Society and Its Enemies (Popper 1946)—he remained true to the requirement of conducting a form of science and scholarly inquiry that is comprehensible and does not talk over the heads of ordinary everyday people. It was no accident that Popper therefore chose a characteristic presentational style that resembled conversation, in which the amicably presumptuous personal pronoun "we" is intended to instigate a sense of fellowship. He also constantly used the rhetorical figure of dialogism, in which an implicit discussion in the form of challenges and questions is simulated (the concessive formulation "All of this I freely admit", implying a hypothetical conversational partner, is a phrase he frequently uses). Popper thus always favoured realism as an "important component of common sense" (Popper 1985, 220). The proximity to everyday life claimed by his philosophy is also evident in his critique of the two-stage concept proposed by Rudolf Carnap and Carl Gustav Hempel, according to which theoretical language and observational language need to be distinguished from each other. Instead, Popper always emphasized that the communicative base of everyday language is ultimately incapable of being transcended.

Gombrich always used a similar method of working. Particularly when he is addressing a wider audience, his style of presentation constantly creates a sense that his arguments are easy to follow. His Story of Art—not by chance so entitled, in order to indicate to the reader the book's narrative quality and remove any reservations that might attach to a lofty, dry "History"—develops discoveries and interpretations in such a way that they do not appear to be the result of scholarly research (although on closer examination the latter is in fact often the case), but instead to emerge from an unfettered view of the phenomena. The reader is given the impression that with only the slightest effort of thought, the results of the interpretation must necessarily prove to be so, as immediately obvious facts. This way of suggesting the evidence affected not only compositional and iconographic matters, but went to the extent that Gombrich, employing the theory of empathy that he otherwise hardly ever used, sometimes felt able to offer the reader a glimpse of the artist's interior mental world or of his feelings and intentions as in a passage on Grünewald's Crucifixion in the Isenheim altarpiece: "There is little doubt that the artist wanted the beholder of the altar to meditate on these words, which he emphasized so strongly by the pointing hand of St John the Baptist. Perhaps he even wanted us to see how Christ must grow and we diminish" (Gombrich 1995, 353).

In the foreword to the German edition of *Meditations on a Hobby Horse*, Gombrich described how strongly his encounter with the English language had changed his style of presentation since he immigrated to London. He mentions a similar account by another émigré, Erwin Panofsky, who in a "brilliant autobiographical essay" also mentioned this "salutary" experience. "After all, the English tradition, particularly in discussing philosophical issues, has upheld the stylistic ideal of the eighteenth century to a much greater extent—the ideal of clarity and ease of understanding that also shaped the style of figures such as Lessing or Lichtenberg in German" (Gombrich 1978, 16).

Searchlight Theory and Compositional Schemas

As early as the *Story of Art* (first published in 1950), Gombrich's work was implicitly based on an aesthetic theory related to the development of perceptual and compositional schemas, which an artist interiorizes as cultural patterns and which decisively determine his style of depiction—to an extent of which he is even unaware. Gombrich's hypothesis was that no one is capable of painting what he sees and that consequently no one can escape completely from the stylistic and pictorial conventions and visual habits of his own cultural background. In *Art and Illusion*, published in 1960, he then attempted to substantiate this hypothesis on the basis of theories drawn from the psychology of perception (such as those of Osgood 1953, 271-272; Vernon 1954; Gibson 1950). Ultimately, this leads to a theory suggesting that aesthetic patterns acquire an autonomous status.

An immediate transference during the artistic act of what is seen is therefore not possible; instead, every artist requires a model, a learned template (Gombrich 1960, 330), which he uses as an aid and can modify to a slight extent (so that in this way a new style or a new "language of art" arises) (on this point, cf. Aldrich 1968, 359–364). Correspondingly, the viewer's practised perception plays a role that should not be underestimated—a capacity that is taken into account during the creative process. The recipient also needs to participate to some extent in the pictorial conventions being used, so that he can projectively interpret the signs applied to the artistic medium (e. g., canvas or paper) in a meaningful way. Gombrich (1960, 184–186) illustrates this in the extreme case of Leonardo's *sfumato*, which despite the deliberate reduction in the information provided on the canvas can be adequately interpreted by the viewer only through the mechanism of projection. Often mere hints are sufficient, which are tacitly supplemented by the viewer mentally following the "etcetera" principle (*ibid.*, 184–185) as in trees in the background that are only hinted at in a rudimentary way (for example, in Constable's pencil sketch of 1816 for *Wivenhoe Park*). Due to the more precise details given in the foreground, these are unquestioningly and naturally accepted as such.

It has often been claimed that in this model of the differentiation of traditional patterns, Gombrich was following his friend Karl Popper's "searchlight theory". Gombrich himself mentions this several times (in detail in 1960, 24). In contrast to what Popper described as the "bucket theory of the mind", according to which knowledge arises through stimuli from the external world that enter the mind via the senses (cf. Popper 1985, 101-117; Popper 1979, 341-362) his "searchlight theory" assumes that the mind as it were searchingly illuminates objects and in this way develops working hypotheses, which in turn can be constantly modified or even falsified by new ones—so that all knowledge is consequently relative (cf. Popper 1999, 71–72).

Referring to Popper, Gombrich sets the pictorial procedure used by artists in analogy with the method of hypothesis formation used by scientists (which is admittedly only modelled on the general cognitive activity of everyday human beings). Gombrich even goes so far as to claim that Popper's theory of the evolution of knowledge is relevant to his view of the history of art. In an ultimately Darwinistic fashion, Popper had regarded the "Tree of Knowledge" as being the product of an organismic process concerned not only with the sequence of problem identification, attempted solutions, and correction of errors, leading to newly posed problems, but also as biological sequences of selection, so that for him, cultural and biological evolution ultimately represent a unified process. In resorting, at least hypothetically, to this "evolutionary epistemology"—a term from Donald T. Campbell (1974, 179–186; on Campbell cf. Schneider 2006, 181–182)—Gombrich apparently wants to naturalize the epistemological foundations of the study of art. In this respect, he is at no great distance from the approaches taken by the First Viennese School, which had always (as in the case of Alois Riegl) based art-historical knowledge on basic physiological patterns (such as "haptic"/ "optic") and in this way converted them into a nativistic model.

Gombrich and Popper: Common Elements and Differences

However, it is questionable whether Gombrich did in fact follow Popper's evolutionary theory, or even assimilate it at all. In the end, he was still far too committed to a humanistic ideal of scholarship, simply through his affiliation to the Warburg Institute, which was based on a humanities-oriented view of history rather than a biological concept of evolution. To take only one example, this is impressively demonstrated by his important studies on the art of the Renaissance, collected in the volume *Norm and Form*, published in 1966. In methodological terms, he works in an unmistakably iconological way here—despite some reservations that he had about individual representatives of the Warburg school (Schneider 2002, 23-37). Certainly, he was always strongly interested in systematic psychological issues, but he attempted to harmonize the findings of perceptual psychology with his historical observations and discoveries.

To the extent that Gombrich uses psychological arguments, he approaches nativist theories³ primarily those of Gestalt psychology—defenders of which included figures such as James J. Gibson (1950) and Wolfgang Metzger (1953). In this respect, he clearly differs from Popper, who criticized precisely the "holistic" approach taken in Gestalt theory—i. e., the theory that the whole is more than the sum of its parts (Popper 1979, 209–210). Gombrich's preference for Gestalt psychology can be traced back to tendencies in the "New Viennese School" in the history of art during the 1920s, ⁴ in which Gestalt theory played an important role—in the work of Otto Pächt and Hans Sedlmayr (cf. the early essay by Sedlmayr 1925, 65–73; see also Wittkower 1931/1932, 142–145 and Schneider 1992, 267–288.), for example. Like Gombrich, Sedlmayr had studied with Julius von Schlosser.⁵ Since Riegl, art history in Vienna has always

¹ In *Art and Illusion* he states clearly and emphatically (in contrast to Popper): "Evolutionism is dead" (Gombrich 1960, 18).

² He had a tense relationship with Edgar Wind, for example. (Cf. Schneider 2002, 23-73).

³ The term "nativism" was probably used for the first time by Hermann von Helmholtz (1867, 804–805).

⁴ Cf. the critical remarks already made by Meyer Schapiro in (1936, 260): "The New Viennese School has, in fact, no historical objects. They tend to explain art as an independent variable, the product of an active spirit, or a *Kunstwollen*, which has an immanent goal".

⁵ However, Gombrich criticized Sedlmayr severely for his "Spenglerian historicism". For Gombrich as an émigré, however, the aversion would have been increased by his awareness of Sedlmayr's involvement in the Nazi system (cf. Gombrich 1960, 17).

had a psychological orientation, in which Gestalt psychology represented the most recent and most "modern" paradigm after the First World War.

Gombrich often mentioned patterns that are described as regular in Gestalt psychology, such as Müller–Lyer illusions (cf. Gombrich 1972, 1–46)—the same problem involved in flip figures such as the "duck/rabbit" (a rabbit's ears can be read as a duck's bill, and *vice versa*) (cf. Gombrich 1960, 4–5). In fact, however, he goes beyond such patterns, which ultimately only describe borderline cases in perception and are unable even remotely to account for the complexity of perceptual processes, in that he analyses art-historical material empirically, rather than constructing test patterns for experimental subjects as the Gestalt psychologists did. This is certainly his own major contribution to a conception of a historical "psychology of pictorial representation" (the subtitle of *Art and Illusion*), which already has sufficient validity in itself even without its (rather legitimacy-seeking) references to Gestalt psychology.

It needs to be asked, however, how Gombrich's *historical* approach can be defined. He himself always emphasized that he decisively rejected historical models such as those his friend Popper described as "historicism". Popper used this term to describe what he called the "oracular philosophies" such as Hegelianism, with its "myth of the horde" and Marx's "economic historicism", which he described as using prophetic methods. Gombrich expressed his aversion, verging on intolerance, to the Marxist model of history (which he described with terminological inaccuracy as "dialectical" rather than "historical materialism") in his review of Arnold Hauser's *Social History of Art*. Gombrich justifiably criticized Hauser for certain inconsistencies and contradictions resulting from the sometimes simplistic analogies he drew between style and social class, as well as the way in which Hauser synthesized older arthistorical explanatory models (from Wölfflin, Dvořák, etc.) with the principles and categories of historical materialism. In his damning review of the book, however, it was ultimately not so much Hauser himself, but rather the Marxist theoretical approach in general that he was targeting. His position here was fully in line with Cold War ideology in the context of McCarthyism (cf. the essay by Andrew Hemingway in the present issue).

Gombrich was completely uninterested in socio-economic forces or "existential laws" in the historical process—i.e., in its "deep structure". He was exclusively interested in the concrete, the immediacy of phenomena, and particularly of course in the making of works of art or pictorial symbols. This approach revealed his phenomenological and to a certain extent also positivist credo, which adhered exclusively to the "given". More precisely, his position can be described as immanentist, since for him it was only references within the system of art that mattered. (It should be noted here, of course, that this was his stated methodological orientation rather than his actual practice; in fact, he allowed more observations from social and cultural history to slip into his analyses than his axioms would really have permitted. (It presupposed the existence of basic patterns that had emerged at one time and were then handed on in tradition as technical representational patterns (cf. Gombrich 1960, 64–65, 66, 264, 319–320, 331, on learned schemas as the basis of all representation).

⁶ Cf. Popper (1946), see also Popper (1944/1945, 86–103). Gombrich quotes from it approvingly in *Art and Illusion* (1960, 17).

⁷ Cf. Gombrich (1953, 79–84); he later included the review in the essay collection *Meditations on a Hobby Horse*. Hauser's book was published in New York in 1951.

⁸ He later expressed his view on one occasion about the relationship between art history and the social sciences (Gombrich 1975).

He did not explain how these patterns arose historically (and admittedly this would be extremely difficult). On the one hand, he traced them back through Gestalt psychology to inborn ways of seeing, which have a universal quality; on the other, the imagination of an individual artist may be involved, in the sense of creative "making" (as in the example of Dürer's well-known "Rhinoceros"; Gombrich 1960, 70-71), which creates a new representational type that can become so dominant as an imaginary image in the minds of subsequent artists that they still continue to use it when real experience to the contrary would require it to be corrected.

As in Ernst Robert Curtius's topos theory (Curtius 1948; on this topic, see also Veit 1973, 136–209; Jehn 1972, vii–lxiv), Gombrich's theory of the persistency (on the "tenacity of conventions", see Gombrich 1960, 20–21, where Gombrich himself refers to E.R. Curtius) of pictorial types or patterns is ultimately conservative—which also explains why he was left at a loss by avant-gardist trends in Modernism, in which artistic skill and an aesthetic encounter with the long early history of art and its basic patterns only play(ed) a subordinate role (cf. Gombrich 1963, 143-150). (The rupture was marked for him by Impressionism, with its form-dissolving tendencies.) Conversely, he was always highly respected by artists, art critics, and art teachers who were committed to the avant-garde principle—an attitude that was linked to his exclusive focus on the artistic material. In addition, Gombrich, with his emphasis on "making", was already in accordance with the antimimetic tendencies of classic Modernism, with its largely nonfigurative orientation.⁹

Despite his immanentist method, even Gombrich was unable to do without externalist or work-transcendent explanations in relation to the history of aesthetic forms or schemas. He once wrote that he was far from doubting "that changes in the intellectual climate and changes in fashion or taste are often symptomatic of social change, or that an investigation of these connections can be worth while" (Gombrich 1960, 17). In such statements, however, he was not thinking of authors such as Hauser propounding materialist arguments. Instead, he was thinking—in the context of the discipline's genealogy—of Riegl, Worringer, Dvořák and Sedlmayr. He distanced himself from them because they had eliminated the "idea of skill" and had thus thrown out in advance the most vital evidence in order "to realize their ambition, a valid psychology of stylistic change" (*ibid.*).

In his centenary year, it is notable that Gombrich's immense scholarly achievements have lost nothing of their freshness and presence. His studies still have a tremendous attraction—certainly to a much greater extent than the central ideas of his friend Karl Popper, of whom less has been heard more recently. Although it may be difficult to accept some of Gombrich's hypotheses, the encyclopaedic breadth of his research, the high level of his thought and his masterly style of communication continue to be an inexhaustible source and stimulus for continuing debate in the field of art studies.

References

Aldrich, V. C. Mothersill and Gombrich on "The Language of Art". *British Journal of Aesthetics* 8, 359–364, 1968.

⁹ With regard to modern art, he liked to cite the following passage from Goethe's *Faust*, part II: "Things ill-fitting cease, / Yours to forswear them; / Things that rob inward peace, / Think not to bear them." ["Was euch nicht angehört, / Müsset ihr meiden, / Was euch das Innre stört, / Dürft ihr nicht leiden."—Choir of the Angels, strewing roses, in the burial scene at the end of the tragedy.] (Goethe 1959, 275–276; cf. the brochure Goethepreis 1994, 18 where the above passage is cited in Gombrich's speech accepting the 1994 Goethe Prize.)

- Ayer, A. J. Language, Truth and Logic. London: Gollancz, 1936.
- **Campbell, D. T.** Downward Causation in Hierarchically Organized Biological Systems. In F. J. Ayala and T. Dobzhansky (Eds.). *Studies in the Philosophy of Biology*. London: Macmillan, 1974.
- Curtius, E. R. European Literature and the Latin Middle Ages. Trans. W. R. Trask. New York: Pantheon Books, 1948.
- Feigl, H. The Wiener Kreis in America. In R. S. Cohen (Ed.). Inquiries and Provocations. Selected Writings 1929–1974. Dordrecht: Reidel, 1981.
- Gibson, J. J. The Perception of the Visual World. Boston: Houghton Mifflin, 1950.
- Goethe, J. W. Faust. Trans. P. Wayne. Harmondsworth: Penguin, 1959.
- Goethepreis. Sir Ernst Gombrich. Frankfurt am Main: Dezernat Kultur und Freizeit der Stadt Frankfurt am Main. 1994.
- Gombrich, E. H. The Social History of Art. The Art Bulletin 35, 79–84, 1953.
- **Gombrich, E. H.** Art and Illusion: a Study in the Psychology of Pictorial Representation. London: Phaidon, 1960.
- **Gombrich, E. H.** *Meditations on a Hobby Horse and Other Essays on the Theory of Art.* London: Phaidon, 1963.
- **Gombrich**, E. H. The Mask and the Face: the Perception of Physiognomic Likeness in Life and in Art. In E. H. Gombrich, J. Hochberg and M. Black. *Art*, *Perception and Reality*. Baltimore: Johns Hopkins University Press, 1972.
- Gombrich, E. H. Art History and the Social Sciences. Oxford: Clarendon Press, 1975.
- Gombrich, E. H. Meditationen über ein Steckenpferd. Von den Wurzeln und Grenzen der Kunst. Frankfurt am Main: Suhrkamp, 1978.
- Gombrich, E. H. The Story of Art. 16th ed. London: Phaidon, 1995.
- **Helmholtz, von H.** *Handbuch der physiologischen Optik.* Leipzig: Allgemeine Encyklopädie der Physik, 9, 804–805, 1867.
- **Hume, D.** An Enquiry Concerning the Principles of Morals [1751]. T. L. Beauchamp (Ed.). Oxford: Clarendon Press, 1998.
- **Jehn, P.** Ernst Robert Curtius Toposforschung als Restauration. In P. Jehn (Ed.). *Toposforschung:* eine Dokumentation. Frankfurt am Main: Athenäum, vii–lxiv, 1972.
- Metzger, W. Gesetze des Sehens. Frankfurt am Main: Kramer, 1953.
- Osgood, C. E. Method and Theory in Experimental Psychology. Oxford: Oxford University Press, 1953.
- **Popper, K. R.** The Open Society and its Enemies. London: Routledge, 1946.
- Popper, K. R. The Poverty of Historicism. In *Economica*, 86–103,1944/1945.
- **Popper, K. R.** Conjectures and Refutations: the Growth of Scientific Knowledge. London: Routledge and Kegan Paul, 1963.
- Popper, K. R. Popper Selections. D. Miller (Ed.). Princeton: Princeton University Press, 1985.
- Popper, K. R. All Life is Problem-Solving: on Knowledge, History and Politics. London: Routledge, 1999.
- Popper, K. R. Objective Knowledge: an Evolutionary Approach. Oxford: Oxford University Press, 1979.
- **Reid, T.** An Inquiry into the Human Mind: on the Principles of Common Sense [1764]. D. R. Brookes (Ed.). Edinburgh: Edinburgh University Press, 1997.
- **Reid, T.** Essays on the Intellectual Powers of Man [1785]. D. R. Brookes (Ed.). Edinburgh: Edinburgh University Press, 2002.
- Schapiro, M. The New Viennese School. In The Art Bulletin 18, 258–266, 1936.
- Schneider, N. Hans Sedlmayr (1896–1984). In H. Dilly (Ed.). Altmeister moderner Kunstgeschichte. Berlin: Reimer, 267-288, 1992.

Schneider, N. Kunst zwischen Magie und Logos. Zum kulturwissenschaftlichen Ansatz von Edgar Wind. In K. Garber (Ed.). Kulturwissenschaftler des 20. Jahrhunderts. Ihr Blick auf der Europa der frühen Neuzeit. Munich: Fink, 2002.

Schneider, N. *Erkenntnistheorie im 20. Jahrhundert. Klassische Positionen.* Stuttgart: Reclam, 2006. **Sedlmayr, H.** Gestaltetes Sehen. *Belvedere* 8, 10 (40), 65–73, 1925.

Veit, W. Toposforschung. In M. L. Baeumer (Ed.). *Toposforschung*. Darmstadt: Wissenschaftliche Buchgesellschaft, 136–209, 1973.

Vernon, M. D. A Further Study of Visual Perception. Cambridge: Cambridge University Press, 1954.
Wittkower, R. Zu Hans Sedlmayrs Besprechung von E. Coudenhove-Erthals Carlo Fontana. In Kritische Berichte zur kunstgeschichtlichen Literatur III/IV, 142–145, 1931/1932.

Institut für Kunstgeschichte Universität Karlsruhe Englerstraße 7 D-76131 Karlsruhe