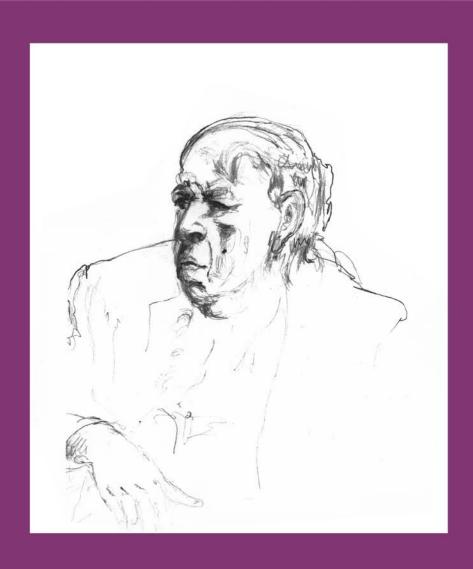
ART and the MIND - Ernst H. GOMBRICH

Mit dem Steckenpferd unterwegs



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Sybille Moser-Ernst (ed.)

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Cover image: Drawing, pencil, by Sybille Moser-Ernst, Sir Ernst Gombrich listening to Così van tutte, London, 15.3.1997.



Der ungetreue Hirte

Der ungetreue Hirte. Fotomontage, 11,5 x 16,2 cm, schwarz-weiss, leicht vergilbt. E.H.Gombrich Estate, Warburg Institute Archive London, former Green Metal Cabinet, Photo Drawer I–X, Caricature. Porträtfoto des jungen Ernst H. Gombrich, montiert in: Foto des Gemäldes *The Unfaithful Shepherd*, Oil on Panel (61,6 x 86,7 cm), The Philadelphia Museum of Art, Cat. 419, Credit Line: John G. Johnson Collection, 1917, Follower of Pieter Brueghel the Elder, probably after a lost painting of 1567–69.

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1.2. David Freedberg

Gombrich and Warburg: Making and Matching, Grasping and Comprehending

Gombrich in Those Days: "Art and Illusion"

The only time I ever heard Ernst Gombrich use anything remotely like an expletive was in speaking of a well-known conservative art critic, who had apparently said that for Gombrich all art was a matter of illusion. Gombrich was angry – and I was pleased. He was right, I felt, to rebut this distortion – or perhaps it was just a superficial reading – of "Art and Illusion". It was frequently used to buttress the charge that Gombrich's failure to engage with contemporary art, particularly abstract art, was yet another symptom of his alleged conservatism, not only in art, but in politics, history, and science as well.

There is no claim in "Art and Illusion" about the constitutive role of illusion in art – not by any stretch of the imagination. It still remains the most serious effort in art history to engage with a contemporary scientific project – in those days the cognitive psychology of visual representation. "Art and Illusion" continues to move me as I struggle to frame the relevance of contemporary cognitive neuroscience to the projects of art history. As I write, no art historian has engaged with this critical new discipline to the extent to which the neuroscientists have engaged with ours – and precisely with some of the issues raised by Gombrich in his great book of 1960.

I first went to the Warburg Institute in late 1969. My aim was to work on the afterlife of Ovid's "Metamorphoses" in printed illustrations of the fifteenth and sixteenth centuries, especially in the Netherlands. I did not know then that Warburg himself thought of a similar subject for his dissertation topic.

Gombrich had a reputation for being forbidding, and so, at first meeting, he seemed. But he was kind to me, and I, of course, was in awe of him. His vast learning was obvious, his intellectual decisiveness unparalleled. He was hostile to anything that smacked of Hegelianism; he thought inductive procedures were self-evidently fatal; he had no patience for estheticizing art history, as Warburg would have called it; and he was irritated by the influence of Panofsky on iconographic studies, whether because of their excessive arcanity or when they

degenerated, into claims for topical reference (as in the case of Panofsky on Correggio's Camera di San Paolo in Parma or of the Krautheimers on Ghiberti's second door on the Baptistery in Florence). He trod cautiously in the whole area of the *Nachleben der Antike*, shunning Warburg's great syncretic leaps of faith from Babylon through the Renaissance, and protesting, at the same time, against the all-too common practice of forms of understanding the Warburgian project in terms of "hunting the prototype", as he often put it, and leaving matters there.

One had to be careful, in those days, of not falling into any of these traps. I think I avoided most of them, except for my alleged inductivism¹ (of which he also accused Warburg's teacher Bastian)² and my continuing interest, from the beginning out, in perception uninformed by education and in precognitive forms of perception more generally. Gombrich would not even have acknowledged the possibility. For him, the eye was always informed. And in this claim, of course, he was not the only one.

To me, over the fifteen years I was in London, first as a researcher in the Library, and then as a young Professor, Gombrich could not have been more generous. But he reigned with a firm hand. Death to anyone who spoke of the spirit of the age, or of *Weltanschauung*, or who dared to hunt the prototype and go no further – or worse, go too far. Though he devoted many illuminating pages in "The Sense of Order" to Riegl, he refused to come to terms with any notion of *Kunstwollen*.³ He was rivalrous with Panofsky and many of his generation of German scholars in exile. He could be brusquely dismissive of the other émigré scholars who worked in the library or in offices in the London building, and very tough on the members, even the youngest, of his "Work in Progress" seminar. The great exception, of course, was Otto Kurz, to whom he constantly referred inside or outside his famous seminar, which Kurz famously slept through until he woke to make an absolutely pertinent comment.

Making and Matching

It was long my habit – for over thirty years – to begin my graduate Proseminar in the history and theory of art at Columbia with the question: "What comes first, making or matching?" And, despite many years of teaching "Art and Illusion",

¹ See E.H. Gombrich, The Edge of Delusion, New York Review of Books, February 15, 1990, p. 6.

² E.H. Gombrich, Aby Warburg. An Intellectual Biography. Chicago-Oxford: Chicago University Press, 1986 (1st edition, The Warburg Institute, London 1970), p. 286.

³ On this aspect of Warburg's trajectory, see Carlo Ginzburg, From Aby Warburg to E.H. Gombrich: A problem of Method, in: Carlo Ginzburg, Clues, Myths and the Historical Method, The Johns Hopkins Uninversity press University Press, Baltimore and London 1989, pp. 17–59, and especially p. 59.

each new year would deliver the same majority of students in favor of matching. It is easy enough to understand how people might think that the first stage of producing an artwork, especially when it comes to imitative art making (after all, the vast bulk of art production, at least until the 1960s) is to look at the object and try to match what they see before them on the surface on which they draw (or within the clay they are modelling).

But by then – as perhaps for ever – Gombrich was attached to the notions of schema and correction, hypothesis and falsification. In this, as is apparent throughout "Art and Illusion", he was following his great friend and inspirer, Karl Popper. For Gombrich there was no other possibility but to insist that the artist first *makes* and then *corrects*, by matching, and by a process of trial and error. She sets down something first; she uses her *hand*. Only then does she match her perception of the visual stimulus with what she has begun to set down. Gombrich finds a way out of the impending aporia by insisting on the inexorability of convention and learning in the production of the initial action of the hand. What is at stake, of course, is the cognitive burden of automaticity, indeed of any automatic action.

The Work of the Hand

The issue of the relationship between vision and touch had long been a preoccupation of Gombrich's – how it could it not be in Riegl's Vienna, or in the light
of his keen awareness of the long tradition from Locke and Molyneux to Fiedler,
Hildebrand, and even Berenson – to say nothing of the great German psychophysiologists he read there on the role of touch in perception? The issue is barely
drawn out in "Art and Illusion"; a little more in "The Sense of Order". But what if
he had spun it out a little further, along the lines he so excellently clarified in his
intellectual biography (the term was Gombrich's) of Aby Warburg, but never, I
think, developed? Perhaps he simply refused to do so, believing, perhaps, that it
might have undermined his unwavering belief in the importance of detachment
over impulse in the understanding of the history of culture and the appreciation
of art (a project of which he was always critical). What if he had considered the
work of the hand in the ways suggested by Warburg? Would he then have thought
again about the implications of his insistence on the cognitive prioritization of
matching over making?

⁴ If matching is the stage of correction, are we to suppose that making comes raw, unburdened by knowledge and experience?

The Differences

For as long as I can remember, much has been made of the intellectual differences between Warburg and Gombrich. But in several critical respects these have been exaggerated, at the expense of Gombrich's finely-tuned appreciation of Warburg. There can be no question of Gombrich's deep skepticism about Warburg's interest in the irrational and of his doubts about Warburg's iconological leaps. Gombrich himself was often fearful of the irrational elements in culture, and inclined to a more positivist approach to the analysis of cultural transmission.

Over the years, the differences between them seem to have become even more sharply perceived, and when I returned to direct the Warburg Institute in 2015, I was astonished by the degree to which Warburg had fallen out of the programmes of the Institute named for him. So too, for that matter, had Gombrich, but to a lesser extent. The assumption was that the two men were engaged in different projects, and that Gombrich's project was not just different, but also more rational and coherent overall. Warburg was barely read, and students, in the open avowal of a preceding Director, were explicitly discouraged from reading him.

At the same time, the view outside the Institute went in the opposite direction. Indeed, one could say that while Gombrich is barely mentioned in much art history now, the work of Warburg, in all its fragmented splendor and suggestiveness, carries a much wider appeal, an aura even approaching that of Walter Benjamin. One of the clearest signs of this reversal is the repeated allegation that Gombrich's biography was a half-hearted work, unsympathetic and sometimes even uncomprehending of both Warburg and his work. ⁵ It is true that Gombrich found it difficult to write his biography under the shadow of Gertrud Bing, and he took many years to produce it finally; but it remains – despite Edgar Wind's famously critical review of 1971 ⁶ – by far the best, most comprehensive and most

⁵ For a brilliant critical account of the long genesis (from 1946 on through 1971) of Gombrich's 1971 biography (as in note 2 above), with much valuable material on his approach to both to the Warburg's conceptions of his Bilderatlas and Gombrich's interactions with the surviving materials, see now Claudia Wedepohl, Critical Detachment: Ernst Gombrich as Interpreter of Aby Warburg, in: Uwe Fleckner and Peter Mack (Eds.), The Afterlife of the Kulturwissenschaftliche Bibliothek Warburg. The Emigration and the Early Years of the Warburg Institute in London, Vorträge aus dem Warburg-Haus, Hamburg, Band 12, De Gruyter, Berlin 2015, pp. 131–164 and notes, pp. 232–240. Wedepohl's long account also gives a good sense we have of the differences between Gombrich's and Warburg's thought. My aim in the present article has not been to enter into any discussion of these much commented differences, but rather to explore where Gombrich's thought, for all his reservations about Warburg's approach to art and cultural history, actually converges – and sometimes depends – on his.
6 [Edgar Wind], Review of Ernst Gombrich, Aby Warburg, An Intellectual Biography, in: The

^{6 [}Edgar Wind], Review of Ernst Gombrich, Aby Warburg, An Intellectual Biography, in: The Times Literary Supplement, 25 June, 1976, pp. 735–6; reprinted with notes and references from Wind's papers as an appendix entitled: On a Recent Biography of Warburg, in Edgar

understanding of all biographies of Warburg to date. It is a brilliant work. To read it is to marvel at the depth of the analysis, the sympathetic approach to Warburg's theories, and - with the exception of his failure to acknowledge the critical role of empathy theory and its origins in Robert Vischer (as also noted by Wind) - a remarkable contextualization of many of Warburg's leading ideas. The fact that so many of the latter were never articulated into coherent wholes makes Gombrich's achievement even greater, and, indeed, even more generous - precisely the quality that has often been found wanting in the assessments, including Wind's negative one, of his biography. Although Wind was perfectly correct in suggesting that "like Vischer, Warburg believed that the physiology of the brain could one day offer the means of giving a scientifically exact account of the workings and its ramifications", and that in his enquiries into empathy and its operations "lie the key to his [...] researches into magic and demonology', as in the essays on Palazzo Schifanoia and on Martin Luther", 7 it was Gombrich, who for all his resistances to both these aspects of Warburg's work - the study of the "physiology of the brain" and empathy - enables us now to appreciate their full potential all the better.

Perhaps the best antidote to the exaggeration of the differences between Warburg and Gombrich remains the profound reflection on their work by Carlo Ginzburg entitled "From Aby Warburg to EH Gombrich: A Problem of Method" which describes both the continuities and the discontinuities in the line from Warburg, Saxl and Panofsky through to Wind, Bing, and Gombrich. Ginzburg chose to emphasize their respective approaches to iconology and the role of images and art in cultural history (or rather, *Kulturwissenschaft*), areas in which Ginzburg has himself become a master. All too aware of the tension between simple interpretations of *Nachleben* in terms of the borrowing of motifs and themes, he clearly saw its implications for the relationship between history, anthropology, and the question of the relative efficacities of images as forms of communication. His account ended with a brief set of reflections on the significance of Gombrich's view of the communicative and functional dimensions of art, as well as of "the beholders share" in the perception of images – particularly, in fact, of illusionistic images.

Wind, The Eloquence of Symbols, ed. Jaynie Anderson, Revised Edition, Oxford: The Clarendon Press, 1993, pp. 106–113.

⁷ Wind, The Eloquence of Symbols pp. 108–09.

⁸ Carlo Ginzburg, From Aby Warburg to E.H. Gombrich pp. 17-59.

A Lost Theme: From grasping to mimicry

But here I want to raise a set of issues that emerges with great clarity in "Art and Illusion", particularly with regard to the claim for making over matching. It is a theme that has dropped out of the reckoning of the complex genealogy of Gombrich's thought and has yet to be considered as a critical element in the work of both Warburg and Gombrich. To consider the ways in which their views overlap and supplement each others' still further enriches our understanding of the potential of their joint intellectual heritage.

Everyone knows about Warburg's commitment to the study of the relationship between gesture and expression. The notion of the *Pathosformel* is central to his thought, yet still inadequately understood. While arguably under-analyzed at the Warburg Institute itself, it might, under Gombrich, it might have provided the perfect weapon against simple ideas of hunting the prototype – a process that if assimilated to that of the *Pathosformel* would have horrified Warburg as much as it did Gombrich. Also insufficiently explored, though often enough commented upon, are Warburg's notions of *greifen*, *handeln*, and their relationship with the one great class of consequence of *greifen* and *handeln* that of *mimik*, mimicry or imitation.⁹

In his remarkable synthetic letter of 9 August 1903 to his cousin Adolph Goldschmidt about the existing and future directions of art history (the "Lehrter Bahnhof letter", as it deserves to be called), Warburg proudly considered himself as the sole representative of the class of art historians concerned with the *Bedingtheiten der Natur des mimischen Menschen*. On the other hand, the famous lecture on the Snake Dance is predicated on the significance of the efficacity of direct grasping of the snakes, and of the ways in which, even with Hopi culture itself, direct handling is replaced by the passage to hieroglyphs and then eventually on to pure symbolization. These were the themes – grasping and imitation – that Warburg sought together. They are joined together by Warburg's clear sense of the ways in which these two superficially disparate concepts are rooted in embodied enactment.

⁹ See now also the illuminating article by Matthew Rampley, Zur Vischer Rezeption bei Warburg, in: Friedrich Theodor Vischer. Leben-Werk-Wirkung, Barbara Potthast / Alexandra Reck (Hg.), Carl Winter, Heidelberg 2011, pp. 299–320.

¹⁰ Aby Warburg, Werke in einem Band, Martin Treml, hrsgg. u. kommentiert von Sigrid Weigel und Perdita Ladwig, Surkamp, Berlin 2010, pp. 672–678, especially p. 676. The letter is accompanied by a remarkable diagram – about which I hope to write on another occasion – showing the different directions of art history.

Greifen to Begreifen

"What we have seen this evening of the symbolism of the serpent should give us at least a cursory indication of the passage from a symbolism whose efficacy proceeds directly from the body and the hand to one that unfolds in thought." This is the fundamental trajectory for Warburg, and this is why he wished to understand the biology that underlies human response – a task so far never completed, though often enough acknowledged, even if only cursorily. Tellingly enough, the passage was omitted from Saxl and Mainland's 1938 version of the lecture. But as his biography of Warburg makes clear, Gombrich realized its significance perfectly. And no one understood better than he what I believe to be the central issue for both of them, however differently inflected by each – namely the need to distance oneself from direct and automatic engagement with the object of vision.

To touch directly means to have access to a basic form of functional instrumentality (here grasping the snake) but not to full comprehension. In this lies the distinction between *greifen* and *begreifen*, between the two English senses, the one literal, the other metaphorical, of *grasping* (as so often, there are no useful prefixes, as there are in German, to clarify the matter). Gombrich was not a master of dialectical thought in the way Warburg – or for that matter Walter Benjamin – was; and in this may lie some of the roots of the positivism that was so critical a part of his character, and that was reinforced by his friendship with Popper and his experience working for the BBC monitoring service during the war. For Warburg, on the other hand, everything he studied entailed a polar tension – in this case between the need for distance and the damage that results from eliminating it by means of instantaneity. In primitive man there was no distance either – just direct grasp. Ritual symbolization superseded direct grasp, and justified it.

Still later, evolutionarily speaking, the loss of distance meant a renewed loss of comprehension, the result of the speed acquired for the sake of high functionality: the very opposite of the deliberate handling of the snake as a means of inducing rain. But the price was high. The primitive's direct grasp ultimately

^{11 &}quot;Was wir heute Abend von der Symbolik der Schlange gesehen haben, soll uns, in leider eine nur zu flüchtigen Skizze, die Wandlung von leibhaftig wirklicher Symbolik, die handgreiflich aneignet, zu der bloss gedachten andeuten." Warburg, Werke, p. 558. The translation here is that by Michael Steinberg in Aby Warburg, Images from the Region of the Pueblo Indians of North America, translated with an interpretative essay by Michael. P. Steinberg, Ithaca and London, Cornell University Press, 1995, p. 49. For the rest of this critical passage, see note 33 below

¹² But see the section on Biomorphism and Biology below well as the references in note 40 there.

¹³ Aby Warburg, A Lecture on Serpent Ritual, in: Journal of the Warburg Institute, II (1939), pp. 272–292.

turned into the destruction of the distance that sustained both symbol and imagination. What it engendered was a life with no reflection on representation or even on ostensive action like pointing.

Besonnenheit as Detachment

It was for all these reasons that Gombrich aligned himself with Warburg on the need for *Besonnenheit* – or more specifically the *Denkraum der Besonnenheit* that arises from distance and the preservation of space. No one who reads Gombrich's many sympathetic pages on Warburg's use of the term could doubt that it is on such grounds that their thinking comes most intensely together.

The detachment implied by the passage from grasping and direct handling through symbolization and on to the space for reflection and contemplation is one of the essential requirements for the achievement of the kind of distance essential for Warburg's notion of the Denkraum der Besonnenheit (which only Gombrich amongst modern commentators has correctly translated – at least in the Warburgian context – as detachment). This *Denkraum* is the space necessary for the achievement of self-awareness in the face of immediacy of engagement. The problem for Warburg was that the modern technologies again collapsed the distance between object and viewer, and made instantaneous a process that ideally should allow space for contemplation. It was and always would be a hardwon space. "Telegram and telephone destroy the cosmos" he famously claimed at the very end of the lecture on the Snake Dance – and so, in his perplexity about the damage these direct technological means did to the space for detachment and self-awareness, he reverted to his concern with the productive polarities: mythology and rationality, magic and science, direct contact and the distancing symbolic forms that underlay the transmission of culture and ensured the vitality (or otherwise) of the afterlife of forms.

Acknowledging the importance of studying "primitive" behaviors for the light they could cast on Renaissance and modern culture, Warburg returned again and again in his last notes, whether for the Kreuzlingen lecture, the *Grundbegriffe*, or the *Mnemosyne Atlas*, to the question of the relationship between direct handling and *Besonnenheit*. And it was this dialectic which Gombrich, for all his alleged resistance to the underlying principles of Warburg's thought, understood and clarified better than anyone else so far.

¹⁴ Warburg, Werke p. 561; Steinberg, Images p. 54.

Causality, Behavior and Embodiment

Aready in January 1896 – even as he was still waiting at the Palace Hotel in Santa Fe for the railway pass that would enable him to go down to the Pueblos and on to Walpi and Oraibi - Warburg noted that "bei den religiösen Handlungen der Pueblo Indianer zeigt sich der wesentliche Act im kausalen Verhalten des 'Primitiven" 15. The sentence is well-nigh untranslatable, since English does not enable one to convey the almost tautological use of embodied action words (Handlung, Act). As if to avoid just this, Gombrich translates "kausalen Verhalten" as "causal concept" - something of a stretch for a term like Verhalten, that here very clearly implies the notion of behavior. ¹⁶ The idea is further expanded by Warburg's succeeding reference to "die 'Verleibung' des sinnlichen Eindrucks", "the embodiment of sense impression". This embodiment Warburg then divided into four different forms - Einverleibung, Hineinumverleibung, Anverleibung and Zuverleibung - which he derived, as Wind already noted, from Robert Vischer's theory of empathy.¹⁷ But what is significant here is his almost triumphant concluding reflection: "Ich glaube, ich habe den Ausdruck für mein psychologisches Gesetz endlich gefunden; seit 1888 gesucht." "I believe that I have finally found the expression of my psychological law which I have been looking for since 1888".18

Both action and emotion are embodied, and so, as he trenchantly put it at the conclusion of his Botticelli dissertation, the most difficult problem of all for the visual arts is the capturing of images of life in movement ¹⁹ – by which he intended both the movement of the body and the emotions expressed by the movement of the body, even as perceived in the stillness of an image.

The Palace Hotel note is fundamentally Warburgian. Its role in the etiology of his thinking about the relationship between grasping, embodiment, functional efficacity and above all empathy cannot be sufficiently emphasized. It may be that Gombrich was being a little unfair when in commenting on it he said that "the reference back [to 1888] is characteristic. What is true of most observers in a sense was also true of Warburg. He saw what he'd hoped to see," and so on, invoking the old and hackneyed parallel between ancient Americans and ancient

¹⁵ Note of 27 January, 1896. Gombrich, Warburg, p. 90. The inverted commas, persistent in Warburg's notes, are worth noting. Even amongst many of the American anthropologists whom he admired, this distancing from the popular use of the term was unusual.

¹⁶ Indeed, his preceding paraphrase works better: "the religious acts of the Pueblo Indians show the essential quality of the causal reaction fo the primitive two ards the external world" (*Ibid*).

¹⁷ Wind, The Eloquence of Symbols p. 108; Gombrich, Warburg p. 91. Cf. also Warburg, Werke, p. 590 for a broader formulation of this set of subdivisions of embodiment.

¹⁸ Warburg, Werke, p. 590. Gombrich pp. 90-91, with a rather different translation.

¹⁹ Famously – "das schwierigste Problem für die bildende Kunst [...] das Festhalten der Bilder des bewegten Lebens", Warburg, Werke, p. 107.

Greece.²⁰ It may be, as Wind remarked in his review, that Gombrich failed to register the scope and significance of empathy for Warburg – but no one at the time was better able to contextualize the meanings and significance of *Handlung*, *Verkörperung* and *greifen* for Warburg than he.

The Renunciation of Touch

It was Gombrich, for example, who suggested locating the origins of Warburg's thoughts on these topics in the conversations he must have had with August Schmarsow in 1889. It was he who found the telling passage in Schmarsow's article on "Art History and Folk Psychology" of 1907 to the effect that "the pointing gesture is for us the end of creative expressive movements. This is the last stage of the immediate relationship to material objects, the renunciation of immediate touch. Regarded genetically, it is nothing than the movement of grasping - Greifbewegung - toned down to a mere hint (Wundt)". But this renunciation of touch therefore also implies the beginning of a purely optical apprehension of the world as a distant image."21 In his art historical work, Gombrich's pupil Michael Baxandall came down heavily on the side of ostensivity, of pointing coupled with language as the only possible art historical response to works of art. But by then the old generosity to Warburg had been lost from the Institute in which Baxandall was a professor of the History of Rhetoric (a designation of his own choice). If only he had had the courage to bring the body back into the reckoning, to face up to its challenge to reflection, and to see it as the essential stage on the way to Besonnenheit!

Right here, almost at the beginning of the book on Warburg, it all comes together. There is the usual sense – apotheosized only a few years later by Riegl – of the change from haptic forms of vision to optical ones; but what was critical for both Warburg and Gombrich, was something that is hardly ever to be found explicitly in any of the theorists of this transition: the issue of renunciation and detachment, the necessary establishing of distance, and the consequent time for reflection on the ways in which vision constitutes the objects of both art and craft, both art and ordinary images – indeed, even abstract and diagrammatic ones. Of course, abstract art is generally alleged to have been forgotten or scanted by Gombrich, while the subject of diagrams is one in which both Warburg and he, if they had had the time – or even time for a conversation – might have become masters.

²⁰ Gombrich, Aby Warburg, p. 91.

²¹ August von Schmarsow, Kunstwissenschaft und Völkerpsychologie, in: Zeitschrift für Ästhetik II (1907), pp 318–9, cited in Gombrich, Warburg p. 41.

Transitions: From Demonic Symbolism to the Laws of the Universe

It was precisely in these polar transitions – from the diagrammatic to the descriptive and from grasping to pointing, grasping (unmetaphorically) to grasping (metaphorically) and finally from primitive directness to civilized *Besonnenheit* – that Gombrich, *malgré lui-meme* perhaps, quietly moved from his own thinking to Warburg's. "It was up to the individual who came into contact with this part of our heritage ['ancient symbols charged with the energy of a primitive form of existence surrounded by the awe of a mythmaking mentality']", Gombrich writes in commenting on Warburg, "to decide whether to succumb to the primitive associations which turned these symbols into demons who ruled over human life". These "primitive associations" were the very demons which both Gombrich and Warburg feared, but it was Warburg, as always, who in his nervousness knew how to see the productive tension at stake, "and instead to turn the energy derived from these cosmic symbols to the business of orientation", as Gombrich himself put it.²²

Here Gombrich was speaking for himself, but no more sympathetic or grateful understanding of Warburg can be imagined. "To view the image as mythical being means turning it into a monster", Gombrich continued. "For the urge to interpret the signs of its being, and thus to use a as 'hieroglyph' with which to explore the future, has resulted in more and more strange and illogical actions to the pure outline of the Greek stellar symbols". The two thinkers came very closely together here. "Only by ridding himself of this pseudo-logic and seeing these images for what they are – conventional landmarks – created to bring order into the chaos of impressions – could mankind learn to master the laws of the universe by means of mathematical calculation."

Nowhere does the impact of Warburg on Gombrich's views both of civilization and of art emerge more clearly than in these pages. In fact, it was only by his insertion of the notion of conventionality into these cosmic sentiments that we detect one of the persistent elements of Gombrich's own thought and which culminated in his interest in diagrams and the schematic bases of representation prior to matching.

The passage seems anomalous in a chapter on "The Theory of Social Mem-

²² Gombrich, Warburg p. 251. On Warburg and orientation, with a selection of relevant uses of the term in his notes, see Dorothea McEwan, Aby Warburgs (1866–1929) Dots and Lines. Mapping the Diffusion of Astrological Motifs in Art History, German Studies Review, 29, no. 2 (2006), pp. 243–268, but especially pp. 243 and 248–242. This was something Gombrich could clearly understand, especially after repeated contact with Warburg's many notes on the problem of orientation on the *Wanderstrassen* of cultures and their myths across time and space.

²³ Gombrich, Warburg p. 251.

ory". For Gombrich the pressures of conventionality on making may justify such a placement, but for Warburg, as Gombrich fairly recalls, the monster that preceded the ordering symbol was the basis of social energy, while the energy, in turn, of cultural transmission was to be sought in "the mnemic function of social memory" (which included the notion, critical for Warburg, of dynamograms and therefore of the movements of the body).²⁴ It played a role both in expression and in orientation and so – the leap is Gombrich's – "we once more hark back to the ideas of origins which Warburg absorbed in his student days".²⁵

Origins

Both, in fact, were grappling with the problem, never fully articulated by either of them, of origins. Once more, Gombrich reminds us of the role of Schmarsow, and of his view of grasping "as the most primitive of the contacts between man and the external world. Primitive man, in this view, is a being of simple immediate reactions [...]. It was by refraining from grasping in order to contemplate that man became truly human. This necessitated a mastery of the immediate impulse. An interval for reflection had to be interposed [...]." As we have already seen, greifen now becomes begreifen and in this pause that enables Besonnenheit, impulse (Antrieb) is transformed into "the awareness of distance between the self and the outside world, and the self-restraint of civilized man in gesture and expression". The tensions that Warburg detected and always troubled Gombrich thus seem to be resolved (in almost the same way as Freud might have).

Zwischenraum I: The Space between Polarities

But Gombrich must continue, for his agenda includes the disposal of the primitive integration of the body with the symbol. "The evolutionist thinkers whom Warburg followed contrasted this attitude with that of the modern scientist who operates with conventional signs, always aware of their arbitrary

²⁴ Gombrich, Warburg p. 250–251. For a good account of Warburg's physiological understanding of memory, mnemosyne and mnemes – much of it derived from Ewald Hering – see now Claudia Wedepohl, Mnemonics, Mneme, and Mnemosyne: Aby Warburg's Theory of Memory, in: Campanelliana, XX (2014), 2, pp. 385–402, but especially pp. 392–401, with an account of what she calls "mnemic biology".

²⁵ Gombrich, Warburg p. 252.

²⁶ Ibid.

²⁷ Gombrich, Warburg p. 252; cf. also ibid., p. 290 and the sections on Filling in the Contours and Impulse and Adjustment below.

character. Between the two extends the realm of imaginative life, the realm of speech and metaphor, of empathy and of art." in the end, the body must be left out. I will not speculate here on whether Gombrich was still dealing with a residue of his own making, in other words, of the here unspoken Kantian tension between empathy and art. But at the same time he appreciated yet another complex yet fundamental aspect of Warburg's own thought, that of the notion of the Zwischenraum - "the image of art, Gombrich himself affirms, belongs to that intermediate realm in which the symbols are rooted."29 This is a slight simplification of another critical Warburgian effort in which he strove to situate both the creation and the pleasures of art in the fusion of two mutually exclusive poles: "Leidenschaftliches sich selbst verlieren bis zur völligen Verwandlung an den Eindruck - und kühl distanzierende Besonnenheit in der ordnenden Betrachtung der Dinge." "To passionately lose oneself to the point of complete transformation into the impression - and coolly distancing detachment in the ordering contemplation of things". 30 This is Warburg in yet another of those immensely fertile reflections that followed his rethinking of the meaning of the Snake Dance and, above all, of primitive forms.

Picture, Diagram, Causality

They came to it in different ways. All his life Gombrich worried about the relationship between what Warburg in another passage on the *Zwischenraum* referred to as the oscillation between the *bildhaft* and the *zeichenmässig* – between picture and diagram, we might say now; between the tendency to the descriptive, and its beginnings in the schematic. This is crucial, as we shall see; but for the moment it's worth remembering that for Gombrich the issue was of communication with the human beholder; for Warburg it was with the divine, with the question of causality and influence over nature.

In fact the polarity of picture and diagram was more specifically defined as the polarity between *bildhafter* und *zeichenmässiger Ursachensetzung*³¹ "the positing of causes as images and as signs", as Gombrich slightly misleadingly put it. In both of them, the hand – and therefore touch – were directly involved. "The

²⁸ Gombrich, Warburg pp. 252-3.

²⁹ Gombrich, Warburg p. 253.

³⁰ Ibid. The translation here is my own, and differs significantly from Gombrich's "[...] leading to a complete identification with the present – and a cool and detached serenity which belongs to the categorizing contemplation of things". I am aware that my translation of Besonnenheit as "detachment" doesn't reflect its more usual meanings of self-awareness/serenity/prudence/sophrosyne.

³¹ Gombrich, Warburg p. 253 citing Tagebuch VII, 1929, p. 267. Cf. Warburg, Werke p. 643.

Indian confronts the incomprehensibility of natural process with his will to comprehension, tranforming himself personally into a prime causal agent in the order of things. For this unexplained effect he instinctively substitutes the cause in its most tangible and visible form. The masked dance is danced causality."³² Back to the concept of causality, here clearly behavioral. But in his 1938 edition of the Snake Dance lecture, Saxl left out the key clarification: the Indian grasps the snake in order to grasp the true cause of mysterious occurrences. The efficacy of the symbolism of the snake "proceeds directly from the body and the hand to one that unfolds through only thought. The Indians actually clutch their serpents and treat them as living agents that generate lightning at the same time that they represent lightning."³³ But it is precisely the passage from direct causality to true comprehension – a polarity that Gombrich would clearly have understood and appreciated – that lies at the core of the fundamental distinction he sought between making and matching.

"Primitive" and Primitive

As we have seen, Warburg made his first jottings on the relationship between direct causality and comprehension already in Santa Fe in early 1896, even before he'd seen a dance; but it was in the sometimes delirious notes he made in the Sanatorium in Kreuzlingen in preparation for the famous lecture that we find their most suggestive and productive articulation. And it is in them, I think, that despite all of Gombrich's worry about Warburg's commitment to the understanding of irrationality and the barbaric (and, poignantly, about Warburg's own decline into madness), that they would have found common ground. Here there was rich material to form the bases for agreement about primitive forms of art, about the anthropology and psychology of diagrammatic forms of repesentation, and the implications for Gombrich's claims for the priority of making over matching. If only they had talked, the older to the much younger man, they might also have illuminated the ever more available material for most of the world's imagemaking before purely figurative or "naturalistic" epochs. How much richer the world of art history and of image studies might have been if Fate had allowed Warburg and Gombrich to speak about the polarities Warburg was exposing - just as would have been the case, too, if Panofsky had not thwarted

³² Steinberg, Images p. 48; Warburg, Werke p. 556 ("Der Maskentanz ist getanzte mythologische Kausalität").

³³ Steinberg, Images, p. 49, as continued from the passage cited in note 11 above: "[...] die Wandlung von leibhaftig-wirklicher Symbolik, die handgreiflich aneignet, zu der bloss gedachten andeuten. Bei den Indianern wird die Schlange wirklich gepackt und als Ursache lebendig angeeignet in Stellvertreung des Blitzes", Warburg, Werke p. 558.

Walter Benjamin from meeting Warburg for a conversation about images and symbols!

Filling in the Contours

In these extraordinarily rich notes (some written "still on opium" in the second half of March 1923) we find a number of lapidary statements that seem to me to lie at the heart of Warburg's – and also of Gombrich's – thinking about images. The first is possibly the most significant of all: "Between prehension and comprehension lie the outlining and delimitation of contours", "Zwischen Greifen und Begreifen liegt die umrissend Umfangsbestimmung". And Warburg immediately goes on: "The artistic process is situated between mimicry and science", De künstlerischen Prozess steht zwischen Mimik und Wissenschaft." We are back at "Art and Illusion". It is not just a matter of mimicry and illusion, but rationality and science, hypothesis and correction, searching and classifying. And we are also back again at the in-between, at the *Inzwischen*.

The first stage of figuration, following upon prehension, greifen, 35 is that of making the contours; the second stage, marked by comprehension, begreifen, that of what happens when the hand is withdrawn from the object and direct engagement – here via touch or grasp – is relinquished. Contemplation and rationality ensue from the patent detachment from direct physical involvement, from the compulsive automaticity of impulse. "Unser (des Menschen) einzig wirklicher Besitz: die ewig flüchtige Pause zwischen Antrieb und Handlung", "humankind's only true possession: the eternally fleeting pause between impulse and action". This is how Warburg puts it in the late Grundbegriffe, where he notes, with even greater compactness than usual, how detachment and impulse are traversed across the critical "in-between" state.

These are fundamental commitments of both Warburg and Gombrich – even though Warburg continued the exploration of superstitious, magical and chthonic engagement as the eternal basis for the detachment that must ensue for contemplation – even as the world returns to direct technological efficacy. This is certainly not the way Gombrich would have proceeded. But to read these passages is to begin to realize how much for both of them the understanding of the communicative dimensionality of forms is tied up with their making. They each

³⁴ Warburg, Werke p. 587.

³⁵ To translate *greifen* here as "apprehension" would be to take away the very force of the verb.

³⁶ Grundbegriffe I, fol. 4, cited in Christopher D. Johnson, Memory, Metaphor, and Aby Warburg's Atlas of Images, Ithaca (New York), 2012, p. 81, note 31. I'm grateful to Claudia Wedepohl for further information about this note, which was first published by Johnson and is not available either in Gombrich, Warburg, or in Warburg, Werke.

had lifelong concerns with primitive forms, even though neither proceeded to consider in any great detail the how of their making. Both, I suspect, would have found nurture for their inchoate ideas on these matters in the continuing discoveries of ever earlier paleolithic image-making, where, in the beginning (as it were) and often after, schematic figures were usually accompanied by the contours and outlines of the making hand itself, later to be matched to reality by filling in (or perhaps one should say by ever more descriptive in-filling)! Both would have appreciated the extraordinary relevance to the ever more persistent question of the origins of human image-making of Warburg's note of 28 March 1923, in which he wrote that "I observed amongst the Indians two juxtaposed processes that vividly show the polarity of man in his struggle with nature; first, the will to compel nature with magic, through a transformation into animals; and second, the capacity to grasp nature, in a vivid abstraction, as a cosmic-architectonic totality that is objectively coherent and tectonically conditioned."³⁷

Biomorphism and Biology

Of course Gombrich would have had little patience, in his notably informal and discursive mode of presentation and thought, with Warburg's reduction of these great issues to polarities, or with his reduction of so much to questions of magic ("the magic involves the apprehension, arising from a wish, of future event only by means of figural mimicry"); and he would have engaged at length - even if only to disagree – with Warburg's intense comments on the relationship between biomorphism, myth and machine. Warburg describes what he calls subjective biomorphism, which "voluntarily and imaginatively connects man with other beings, even inorganically"38, and in which mythic thinking is derived from a biomorphic "organically defined determination of contours that seems to precede more reduced forms." Objective biomorphism, according to Warburg, describes the ways in which even machines are "primitively" perceived - whether by savages or by peasants - as organic form. Even if Warburg might have emphasized the demonic dimension of such operations at the expense of the rational, both of them would have acknowledged and commented at length on these critical transitions, and agreed on the biological dimensions of making and matching.⁴⁰ There is no doubt that Gombrich perceived better than anyone

³⁷ Philippe-Alain Michaud, Aby Warburg and the Image in Motion, translated by Sophie Hawkes and a Foreword by Georges Didi-Huberman, Zone Books, New York 2004, p. 319, well translated by Jeff Fort from the original text in Warburg, Werke.

³⁸ Michaud, Image in Motion p. 311.

³⁹ Warburg, Werke, p. 579.

⁴⁰ Michaud, Image in Motion, p. 320. The comments on Gombrich's biology have been many,

before him – perhaps even more clearly than Wind – that he should have recognized the extraordinary significance of the following passage:

"The will that appears to underlie events must be explained in mythic thought by means of biomorphic determination, that is, by the identification of the cause with a well-defined organism. This cause will replace the real agent as far as it is capable of being 'determined' by science, and substitute for the indefinite and elusive a biomorph that is enlivened, familiar and identifiable. Whenever I attempt to organize thought I connect images outside myself with each other. This entire biomorphism is a phobic reflex and the other is a a cosmic act [...]. The phobic reflex of the biomorphic imagination lacks the capacity to precipitate a mathematically ordered cosmic image. The objective precipitation of an image can be found in the search for harmonic systems among the American Indians and in Hellenistic civilizations. What constitutes the gigantic progress here over simple [Gombrich translates as 'primitive'] biomorphism is precisely that the latter reacts to the memory function with a defensive measure, while in these efforts [Gombrich has 'experiments'] of structural thought the hand no longer wields a weapon but an outlining tool."

What Warburg does, of course, is not just to relate biology to memory, but also to reinsert the key question for both of them of the transition from weapon-bearing hand to tracing and outline. The passage from primitive directness to the distancing processes offered by the tool which in turns provides structural order is critical here. Gombrich understood this perfectly, even though, significantly, he translated Warburg's "einfach" by "primitive" – a term Warburg rarely used without a high degree of self-awareness, and even though Gombrich missed the critical element of contour-making present in "das umreissende werkzeug" by incorrectly referring to it as a "tracing tool". The passage reveals, as few others can, those fundamental ontological transitions in both Warburg and Gombrich that go from the biomorphic dimensions of mythopoeic thinking and causal attribution to rational and scientific thought.

but few have analyzed its content more than superficially. John Onians has always insisted on this aspect of his work, especially in *Art and Illusion*, but also, more cursorily, in *Meditations on a Hobby Horse* (see John Onians, "Gombrich and Biology", in Paula Lizzarga, ed., *E.H. Gombrich in Memoriam*, Pamplona: Ediciones Universidad de Navarra, 2003, pp. 95–119; see also *inter alios* Göran Rossholm, *To be and not to be: on Interpretation, Iconicity and Fiction*, Peter Lang: Bern, 2004, especially pp. 186–188. Patrick Maynard, *Drawing Distinctions, The Varieties of Graphic Expression*, Ithaca and London: Cornell University Press, 2005, especially pp. 97–125 and 242 (also contains much relevant to my discussion here on the matter of contour). For a rich discussion of the passage from the biology of art to questions of memory in Warburg see Severi, Warburg anthropologue, 2003, as well as an important claim for the necessity of "critically examing the morphological method of the biology of art and its way of reconstructing the mental operations involved in deciphering images" (p. 128), though whether the question in Warburg is reall that of "deciphering" ("déchiffrement"), or, one supposes, iconography, is entirely moot.

⁴¹ Basically Gombrich's translation in Gombrich, Warburg, pp. 219–220 with some significant changes of my own. Warburg, Werke p. 579.

Biology and Mathematics

While Gombrich may have found Warburg's arguments confused and sometimes melodramatic - from phobic reflexes to cosmic images based mathematical order - the two of them stood more tightly together than has generally been acknowledged in their common sense of the relationship between biomorphism and the transition to what Warburg calls "a cosmic image based on mathematical order". One begins to realize how much further Gombrich might have developed the question of the relationship between schema and corrected schema, and perhaps been less adamant about the priority of making over matching, had he pursued this train of thought. Above all, they would both have agreed not only on the need to examine the historical, social and anthropological dimensions of this process, but also to come to terms with the fact that in order to understand anything about the history of imagemaking, the transmission of culture, or the Pathosformel one has also to attend to the biology of the movements of the body⁴² and in particular, when it comes to making and matching, the movements of the hand. Motion, emotion and embodiment must all be studied in terms of their biological underpinnings before it becomes possible to understand how they are modulated by historical, social and ethnological circumstance and context.

Aestheticizing Art History and the Beating Heart

Right at the beginning of these notes Warburg wrote that "I had developed a downright disgust with estheticizing art history. The formal contemplation of images – not conceived as a biologically necessary product situated between the practices of religion and art (which I understood only later) – seemed to me to give rise to such a sterile trafficking in words that after my trip to Berlin in the summer of 1896 – that is, immediately after the trip to America – I tried to switch over to medicine." The passage has not, of course, gone unnoticed. There was no commoner assertion that came from Gombrich's lips than the one protesting his aversion to "estheticizing art history" – as, he always reminded his audiences,

⁴² This is not to take issue with Claudia Wedepohl's blunt claim at the end of her excellent article on Gombrich and Warburg that "It has always been recognized that Ernst Gombrich was highly sceptical of the theoretical value of collective or mass psychology, either rooted in biology or sociology, to explain history", Wedepohl, Critical Detachment p. 163. For a start such an approach would clearly have been inconsistent with his professed resistance to Hegelian notions of history; but as a means of understanding individual responses, it would be a mistake, I believe, to this is to scant the extent of Gombrich's interest in the fundamentally biological bases of human responses to images and to art. See the preceding note for further references.

⁴³ Warburg, Werke p. 569. Gombrich, Warburg p. 118.

both Warburg and Saxl had themselves insisted. The question that arises is precisely that of the degree to which Gombrich appreciated the relationship between the rejection of estheticizing art history and the commitment to finding an adequate biological account of the impulse to art? This went far beyond questions of biomorphism or locating art in a metaphysical Zwischenraum. "Conscious and reflective man is situated between systole and diastole", he wrote in his notes of March 1923 about the passage from greifen to begreifen. "The abstraction of a numerically and harmonically ordered space that occurs in the processes of art making", he continued "accompanies the alternation from systole to diastole as a transient inhibitory process."44 No one has yet developed this remarkable intuition about relationship between abstraction, broadly taken, and the biological bases of the inhibition implicit in the forms of consciousness entailed by esthetic judgement. Recent studies provide basic material for precisely this approach, and I believe it should be possible to develop it in terms of present-day accounts of the relationship between social stress and the neural substrates of inhibition. 45 But Warburg's engagement with biology also raises a further and possibly even larger question that has affected my own work more than Gombrich's: that of how biology underpins the relationship between religion and art, or, more specifically, how it underpins all religious claims about the relationship between image and prototype and between art and enlivenment, thereby resolving magic into religion and the body of the viewer into the body not just of the image but of the prototype itself.

Handling, Contemplation and the In-Between

Even so, the quest for an understanding of the nature – or rather the ontological location of the artistic act – remained powerful in both of them. Both struggled to place making and mimicry in relation to imagination and contemplation till the very end. In the notes for the introduction to the *Bilderatlas-Mnemosyne*, Warburg wrote "Between imaginary grasping and conceptual contemplation stands the supple gauging of the object with its consequent plastic or painterly mirroring,

^{44 &}quot;Eine solche Hintergrundsvorstellung, die die Wandlung von Systole und Diastole begleitet als vorübergehende Hemmungsvorrichtung, ist die Abstraktion eines zahlenmässig harmonikal geordneten Raumes", Warburg, Werke p. 587.

⁴⁵ I hope elsewhere to develop this critical idea in terms of present day accounts of the relationship between social stress and the neural substrates of inhibition (see for example Ruben T. Azevedo, Sarah N. Garfinkel, Hugo D. Critchley and Manos Tsakiris, Cardiac afferent activity modulates the expression of racial stereotypes, Nature Communications, 8, 2017, and Sarah N. Garfinkel et al, "What the heart forgets: cardiac timing influences memory for words and is modualted by metacognition and interoceptive sensitivity, Psychophysiology 50, 2013, pp. 505–12.

which one calls the artistic act", as Gombrich translated "Zwischen imaginärem Zugreifen und begrifflicher Schau steht das hantierende Abtasten des Objekts mit darauf erfolgender plastischer oder malerischer Spiegelung, die man den künstlerischen Akt nennt." But in turning "begriffliche[r] Schau" into "conceptual contemplation" and – even more tellingly – "das hantierende Abtasten des Objekts" into "the supple gauging of the object" as representative of the middle stage between *greifen* and *begreifen* that constitutes the artistic act, Gombrich significantly removed the essential notions of the role of touch, handling, manipulation and embodiment from their constitutive roles in artmaking. It could perhaps be argued that such a position might have strengthened his claims for the priority of making over matching, even though it would not have reduced the possibility of correction – therefore "matching" – enabled by the state of imaginative grasping that precedes stabilization as an image, or even a plain schema. Here we find ourselves at the breaking point of a tensed Warburgian polarity.

The Zwischenraum, it will be remembered, was also the place of oscillation between bildhafter und zeichenmässiger Ursachensetzung, pictorial and diagrammatic positing of causes – what Gombrich simply translated as "the positing of causes as images and signs." + that not only stood for the "intermediate realm in which symbols are rooted" (as Gombrich translated it) to which, therefore, the image of art belonged, but also provided the art historical material for an Entwicklungs[psychologie] of these transitions. These are the poles of the relationship; these are the elements in Warburg, which for all their personal and philosophical antipathies, born out of Gombrich's fears of irrationality, superstition and barbarism, came to fruition in the latter's more relaxed yet constrained and ever brilliant thought.

Impulse and Adjustment

But at least one problem remains: that of the priority of making over matching, perhaps the most convincing aspect of "Art and Illusion" altogether. It might seem that both Gombrich and Warburg had a sense of both the ontological and

⁴⁶ Warburg Werke pp. 629-30, Gombrich, Warburg p. 290.

⁴⁷ Gombrich, Warburg, p. 253, from Journal VII, 1929, p. 267. (Warburg, Werke, p. 643)

⁴⁸ After all, as he had noted a year earlier "in der Mitte zwischen dem Chaos der leidhaften Erregung und vergleichen ästhetischer Tektonik ereigenet sich das Künstlerschicksal", Gombrich, Warburg, p. 253, citing Warburg Institute Archives, Handelskammer, Notebook, 1928, p. 44. Cf. the section Zwischenraum I: The Space between Polarities above.

^{49 &}quot;Ikonologie des Zwischenraumes. Kunsthistorisches Material zu einer Entwicklungspsychologie des Pendelganges zwischen bildhafter und zeichenmässiger Ursachensetzung", Gombrich, p. 253, Warburg, Werke, p. 643 (with "Entwicklungspsychologie" given incorrectly as "Entwicklungsphysiologie").

teleological priority of the diagrammatic over the descriptive, and - most certainly - of the priority of the hand over mentalizing correctives to the prime actions of the hands. But how do such prime actions originate? Gombrich, finds a way out in the appeal to convention, and in particular, stylistic conventions. Still, this does not resolve the question of whether impulse, Warburg's Antrieb, might not motivate the first efforts at making, and we still cannot be sure of the extent to which impulse may be free of convention or social conditioning. In some cases, surely it might be. As Warburg noted in discussing the artistic process - in other words, a stage of comprehension rather than just prehension - "it uses the hand, but the hand reverts to its movement". 50 What actually drives impulse, after all? From time to time it may escape pressures of style, just as making surely must too. It is subject to both neural and muscular whim, accident, trauma, and neglect of many kinds, and so may be less conditioned by experience than Gombrich thought. In this case, then, we must surely begin to acknowledge the precedence of imaginary handling, and the possibility that correction of imagination may even precede making. How would we know whether the imaginary handling of the object is not a basically matching process, actually taming the impulsive elements in manual making? In commenting on Warburg, Gombrich wrote that "the artist who draws an object no longer grasps it with his hand but he has not retired into pure contemplation either. He follows its outlines as if to get hold of it". 51 Here, if ever, is a Zwischenraum to conjure with!

The Triumph of Distance

Such questions about what might be called the ontology of both imagination and proprioception must await further philosophical and neuroscientific investigation. We may continue to argue about the degree to which Warburg offered grist to Gombrich's Popperian mill about schema and correction; but where they undoubtedly came together was in the commitment to the idea of "distance' or 'detachment' as a condition of civilization both in art and thought",⁵² as Gombrich put it in commenting on a key passage – the opening, in fact – of the introduction Warburg intended for the *Bilderatlas Mnemosyne* project: "The

⁵⁰ Michaud, Image in Motion p. 322; Warburg, Werke p. 587 (the entire passage is worth citing: "Der künstlerische Prozess steht zwischen Mimik und Wissenschaft. Er benutzt die Hand, aber sie kehrt zu ihrem Ablauf zurück, sie ahmt nach, d.h. sie verzichtet auf ein anderes Besitzrecht dem Object gegenüber, als seinem äussren Umfang abtastend nachzugehen. Sie verzichtet also nicht vollkommen auf die Berührung des Subjects, wohl aber auf die begeifende Besitznahme.").

⁵¹ Gombrich, Warburg p. 253.

⁵² Gombrich, Warburg p. 288.

conscious creation of distance between the self and the external world may be called the fundamental act of civilization. Where this gap ('Zwischenraum' again) conditions artistic creativity, this awareness of distance can achieve a lasting social function".⁵³ This surely must remain a question for any future Warburg, a Warburg that meditates on the heritage of its two greatest leaders by far. What they remind us is the need to regroup and organize a *Kulturwissenschaft* that is not only historical, anthropological, psychological, and political, but one that fully acknowledges the role of human biology in its many formations. Both Warburg and Gombrich opened paths to understanding the ways in which the bodily processes of movement, proprioception and interoception interact with memory and emotion, and suggest how such processes lie at the origins of our engagements with art, whether in making its objects or in responding to them; and their followers have continued to provide abundant material for understanding how they may – or may not – be modified both within and across cultures.

Movement and Morality

Finally we may come back not only to the hand but to the entire issue of Handlung, of action and behavior, indeed of the entire gamut of embodied activity (even in the absence of limbs), that subtends not so much of what we call civilization but of cultures more generally. "What we call the artistic act is really the exploration by the groping hand of the object, succeeded by plastic or pictorial fixation equidistant from imaginary grabbing and conceptual contemplation. These are the two aspects of the image, one devoted to the fight against chaos - because the work of art selects and clarifies the contours of the individual object – the other requiring the beholder to submit to the worship of the created idol that he sees. Hence the predicament of civilized man, which ought to be the true object of a science of culture that takes as its subject the illustrated psychological history of the middle space between impulse and action, 'das eigentliche Objekt einer Kulturwissenschaft bilden müssten, die sich die illustrierte psychologische Geschichte des Zwischenraums zwischen Antrieb und Handlung zum Gegenstand erwählt hätte'."54 To which Gombrich adds "It is the moral achievement of the pause for reflection that Warburg sees at stake in

⁵³ Gombrich, p. 288, translating Warburg's note of "Bewusstes Distanzschaffen zwischen sich und der Aussenwelt darf man wohl als Grundakt menschlicher Zivilisation bezeichnen; wird dieser Zwischenraum das Substrat künstlicher Gestaltung so sind die Vorbedingungen erfüllt, dass dieses Distanzbewusstsein zu einer sozialen Dauerfunktion werden kann [...].". Warburg, Werke p. 628 (Mnemosyne Einleitung, 11/VI/1929).

⁵⁴ Warburg, Werke p. 630; Gombrich, Warburg p. 290.

the process of the revival of ancient expression in the Renaissance"⁵⁵ – and, he might have added, in our time too.

The Making of Art History

For both Warburg and Gombrich the hand – making – preceded detachment. For Warburg detachment entailed contemplation; for Gombrich classification and matching. But in both cases, the direct work of the hand in the work of art, just like the beholders empathic involvement in it, had always to be superseded by detachment, reflection, and thought.

All this enables us to make much more sense of the relationship between *Kunstgeschichte* and *Kulturwissenschaft*. The former is critical for the latter, and cannot be sidelined simply by the relegation of art history to image history, critical though the latter may be for the understanding of the former – and, indeed, vice versa.

Yet neither Warburg nor Gombrich, for all their fears of estheticizing art history could entirely relinquish the question of the communicative efficacity of the work of *art* (as well, obviously, as of other images too). For both of them this entailed the grasp, the hand, the action. Whether one argues about the priority of mentalization or not, the biological body is always entailed.

But a question remains. We may think we understand the ways in which the spontaneity of making precedes the paced deliberateness of matching, we may grasp the relevance of the need for Besonnenheit in its many related meanings of contemplation, sophrosyne, self-consciousness and detachment, yet still we wonder about the absolute priority Gombrich assigned to making over matching. After all, may the hand not operate free of convention and of its own accord, autonomously and spontaneously, because of trick or deficit of brain or body? There it lies, that manufacture, on its own, automatic and uninformed by cognitive stock or even experience. Gombrich might even deny the possibility – but once again the aporia opens up before one. Pure spontaneity of making - were such a thing possible - might even offer further grist to the priority of making over matching. The next step would be to consider whether the neural substrates of grasping and making do not subtend not what one has learned, but what one has not learned, and what the body brings forth because of the accidents of anatomy, the disinhibition of action, and the default modes of the frontal cortex. I doubt that Gombrich would have been favorably disposed to such an approach – though Warburg almost certainly would have been, to judge from the extraordinary amount of evidence his library provides for his interest in the behav-

⁵⁵ Gombrich, Warburg ibid.

ioral psychology of his time and to his pursuit of the substrates of mnemes and mnemic behaviours. Both he and Gombrich would certainly have been fearful – rightly – of the context-light and philosophically pared-down forms of reductionism that understanding them currently entails (as in much of current empirical neuroaesthetics). But this is a story, clearly, for another occasion.