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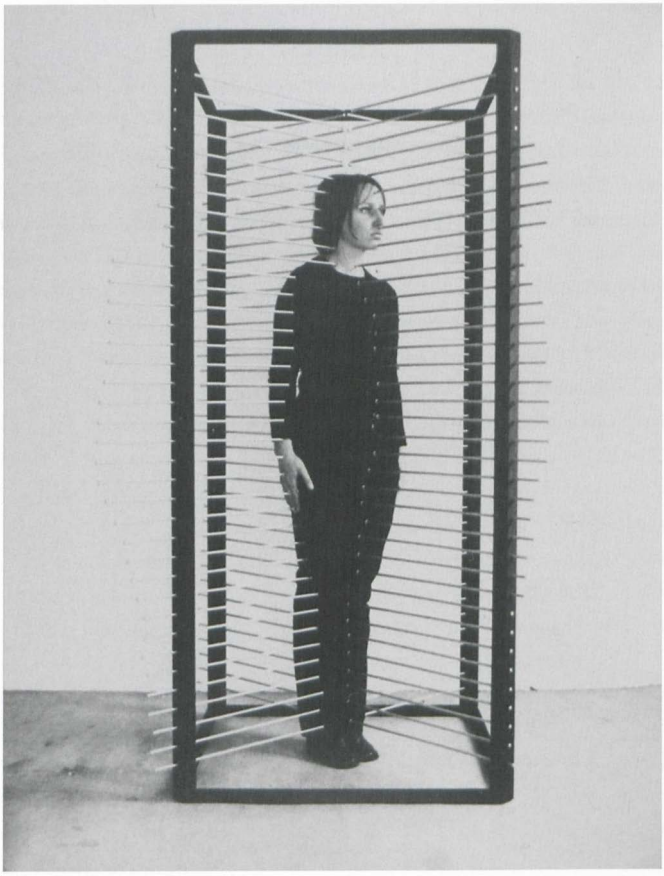


1
REBECCA HORN /
MESSKASTEN /
1970 /
STAATSGALERIE
STUTTGART

ECKHARD LEUSCHNER

Measuring Beauty: Ideal Proportions and the Human Figure ca. 1930

"'Why did you measure that overcoat?' I asked, with some curiosity.
'*Parbleu!* To see how long it was', replied my friend imperturbably. I was vexed. Poirot's incurable habit of making a mystery out of nothing never failed to irritate me."
Agatha CHRISTIE, *The Murder on the Links* (1923)

Poor Hastings. Although Poirot answered his question, he still felt that he had learned nothing new. And, indeed, little is said if someone claims to be measuring something or somebody in order to establish how long, high, dense, loud, light, etc. a person or a thing is. As points of interest the parameters and instruments chosen for the measuring process and the assumptions or intentions of the person doing the measuring are equally or more important. This observation not only applies to criminology but also to the fine arts, including architecture and architectural history.

The *Messkasten* (Measuring Box), an early work by Rebecca Horn (FIG. 1),[1] consists of a black metal frame, the vertical elements of which are perforated at regular intervals, and horizontal aluminum rods of the same length placed in the holes. These rods can be moved forward to the center of the box or away from it. A photo of the work in operation shows the artist herself standing upright in the center of the box with her arms attached to her body. As long as she is fixed in the construction, each of the rods has a point of contact with her body. If two of the four lines of rods are set back and allow her to exit (or escape) from the *Messkasten,* the other two lines remain in the measuring position, thus defining the profile of the person measured and representing an outline of his or her individual physical self.

IN / KIRSTEN WAGNER AND JASPER CEPL (EDITORS) /
IMAGES OF THE BODY IN ARCHITECTURE: ANTHROPOLOGY AND BUILT SPACE /
TÜBINGEN · BERLIN / ERNST WASMUTH VERLAG / 2014 / PP. 76–98

In the — fairly limited — reference to Horn's oeuvre it has been pointed out that in this work the later dealings of the artist with the relationship of body and space are already announced. One might even assume that the construction of the box alludes to Leonardo da Vinci's *Vitruvian Man* and the geometrization of the human body in renaissance thought, or that the *Messkasten* is based on artistic practices of the early modern period, namely the transfer or replication of three-dimensional objects through systematic marking of measuring points.[2] However, Horn's *Messkasten* is unlikely to exhaust itself in references to art history or outdated studio practices. At this point, therefore, we are facing a methodological problem: the ways in which 20th-century art continued to rely on artistic practices and measuring methods of the kind just mentioned need to be researched more precisely.

METROLOGY AND THE ARTS

Artists of the early modern period did a lot of measuring. They applied theses activities either to individual human models, whose dimensions or 'body types' they established, or to exemplary ancient sculptures, whose proportions they considered to be canonical standards of beauty.[3] In the 19th century, concepts of beauty and the beautiful remained closely associated with the idea of the harmonious relations of individual body parts to each other, i.e. the mathematically quantifiable proportions that artists found (or, rather, thought they could find) in the most celebrated ancient works.[4] Until the early 20th century, art academies based their images of the human figure on binding canonical proportional charts, and, by teaching students to take and memorize the measurements of the most revered sculptures of antiquity (or, as it were, of casts), generations of artists learned the importance of absolute and relative measures and practiced the transfer of such metrological knowledge to their own works. Not coincidentally, the original meaning of the ancient Greek word *canon* (yardstick or ruler) is closely related to this practice.[5] In the Romantic movement, rulers served both as an elementary means of image construction and as symbols of an all-encompassing metaphysical order, a spiritual correspondence of microcosm and macrocosm. In a painting by Georg Friedrich Kersting representing the painter Caspar David Friedrich in his studio,[6] measuring tools are shown hanging on the wall; since the artist is represented working on a landscape picture and although the window is closed and barred, these tools describe the artist's work as a mental rather than a technical process.

A major reason for artists to move away from the age-old practice of determining absolute or relative measures of the human body was their growing awareness of the differences between the physical measures of an object or person and the dimensions of a representation on a picture plane or in a piece of

sculpture. Artists or art critics such as Adolf von Hildebrand, Hans von Marées, and Konrad Fiedler discovered the autonomy of the artistic image.[7] Not much later, some painters went even further and said farewell to all 'rational principles' or 'objective rules' formerly considered to be the essence of artistic creation. As an international avant-garde movement, Expressionism swept away the last remnants of such notions.

In his famous essay on the history of proportion, first published in 1921 as "Die Entwicklung der Proportionslehre als Abbild der Stilentwicklung" ("The History of the Theory of Human Proportions as a Reflection of the History of Styles"), Erwin Panofsky explains it as a "modern, subjective viewpoint that a work of art is something utterly irrational."[8] According to Panofsky, to contemporary viewers it is "uninteresting, if not distressing, when the historian tells him that a rational system of proportions, or even a definite geometrical scheme, underlies this or that representation." And, indeed, clear indications of an aversion to the artistic imitation of fixed measures or 'natural' proportions can be found in many works of avant-garde painters active in the first years of the 20th century, for example in Umberto Boccioni's painting *Volumi orizzontali* from 1912. In this picture, Boccioni added exact quantifications of the spatial dimensions represented, denoting both body measures of the sitter and certain distances between her and buildings in the background or other objects. He thus mocked all expectations of a proper representation of 'real' spatial relations and distances in his canvas.[9]

While pre-World War I artists displayed an ever more skeptical attitude towards concepts of fixed measures in art (including theories of ideal human proportions), a lot of measuring went on in the late 19th century. Both in the natural sciences and in the growing industrial production, there was a metrological boom, as both reacted to a tremendous need for the standardization of virtually every part of modern life. A quick survey of manuals on metrology published in the early 20th century is sufficient to understand the extraordinary variety of measuring instruments and procedures, all of which claimed to enhance or optimize human life by prescribing standard measures or *étalons*. State institutions guaranteed the accuracy of measuring units, the best known of which is the *mètre* standard introduced after the French Revolution (*mètre étalon*). The newly established metrical system resulted in a farewell to previous metrological units that had been based on body analogies such as the foot or the yard — at least in the countries that adopted the French system. It is well known that Marcel Duchamp created his *Trois stoppages étalon* as a laconic commentary on the normative tendencies of his time. He cut three rulers in the forms of threads that he experimentally threw to the ground and thus created 'artistic' étalons.[10] The questions Duchamp's *Stoppages* asked were manifold: Do 'objective measures' exist? Can (or should) art have any binding measures or rules? Can art devise methodological or metrological alternatives to those employed by science?

In his already mentioned essay on the history of proportional theories in art, Panofsky pointed out that in his own era probably only anthropologists and criminologists (and some enthusiasts — *Schwärmer* — among artists) remained interested in human proportions. He was right in the sense that both criminal investigation and anthropology were important fields of research in which human beings were still subjected to measuring procedures. However, regarding the renewed interest of avant-garde artists in concepts of measure and proportion in the early 1920s, Panofsky was decidedly uninformed. Hardly an epoch of 20th-century art has created more depictions of measuring tools, rulers, goniometers, anatomical charts, etc. than the generation active in the years between the start of World War I and the mid-1930s. Some of these images can be explained as visual expressions of the new post-World War I ideology of the *retour à l'ordre*. For example, in the Italian *Novecento,* images of rulers and compasses are frequent features. In this movement in the 1920s, which was sponsored by Margherita Sarfatti, Mussolini's mistress, artists such as Mario Sironi turned away from the abstractions of the pre-war avant-garde and sought a new foundation of art.[11] They represented measuring instruments not only because such details appear

2
MARIO SIRONI /
THE STUDENT /
1922–24 /
PAINTING /
PRIVATE
COLLECTION

in portraits of artists and architects created during the Italian Renaissance,[12] but probably also because rulers represented their patriotic 'rectitude'. *The Student* by Sironi (FIG. 2) is a strongly geometricized figure in the manner of Piero della

Francesca, and thus alludes to the orderly pursuit of artistic activity. In addition to that, the woman's left forearm rests on a table next to a goniometer, thus illustrating the origin of a major measuring unit, the yard, in a body part.[13] Although Sironi's painting can hardly be reduced to its political implications, it was meant to visualize the convergence of the current artistic and political ideals in Italy.

Other images of measuring tools created in or soon after Word War I, especially those by Giorgio de Chirico, cannot be connected as easily with the *retour à l'ordre*. Despite some superficial similarities, the *Novecento* movement had little to do with the metaphysical art of De Chirico, whose pictures abound with representations of rulers, yardsticks and anatomical charts, all of which evoke the grand traditions of academic training in 19th-century art schools, even though they also contain images of factories and steam trains and thus defy all demands for lofty academic clarity and 'perfect measures'. With this irritating display of metrological skepticism, De Chirico's *Metafisica* was a major source of inspiration for the Surrealists.

Still Life in the Studio, painted by Otto Dix in 1924 (**FIG. 3**), represents the corner of a room, probably an artist's studio. Coarsely grained boards form the

3
OTTO DIX / *STILL LIFE IN THE STUDIO* / 1924 / PAINTING / KUNSTMUSEUM STUTTGART

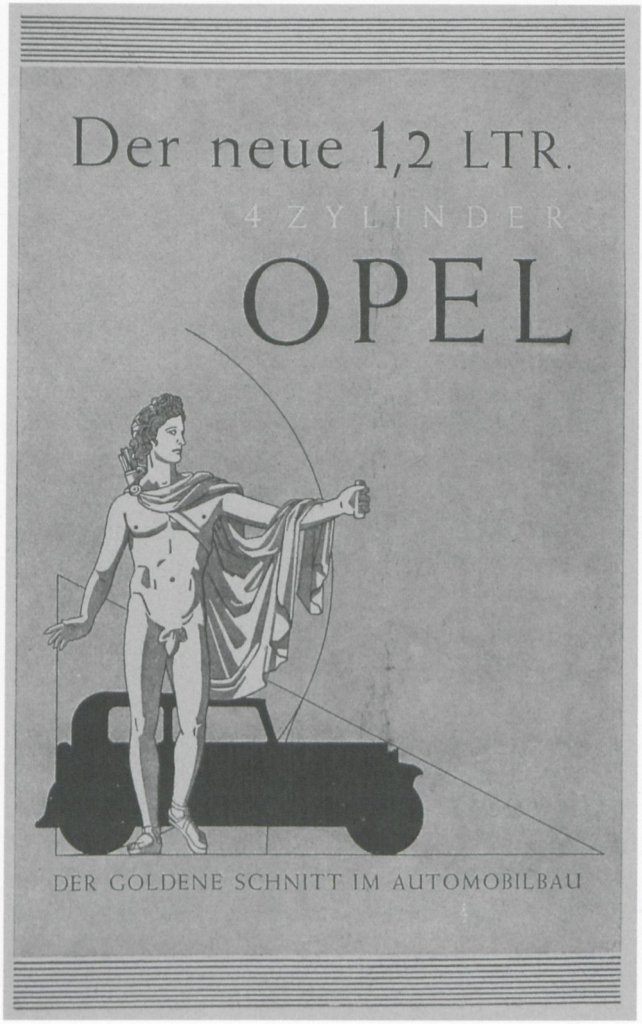
floor, and the walls are covered with raw, partially cracked or smeared-on plaster.[14] In this composition, the artist has arranged items related to his professional activities in a most unsystematic manner; even the spatial arrangement

is meant to look inharmonious. Only upon closer inspection, one recognizes that there is a living nude model among the studio junk: a naked middle-aged woman with a dark cloth over her groin and large, sagging breasts. She has her head thrown back and raises her right arm with bent hand. Her face betrays the effort of this gesture, while the absence of a narrative context makes her pose look totally unmotivated. Next to the woman, on a chair, is a life-sized doll with a slightly damaged skin of fabric and a light blue cloth draped over her waist and left arm, whose splayed fingers seem to echo the gesture of the life model. Where the doll's head should be, only an elongated stub remains. Even closer to the viewer is a blank easel turned diagonally away, on which, quite prominently, a red-painted T-square is leaning.

Certain details of Dix's provocative picture, such as the studio utensils, were probably meant as allusions to the traditional standards and shared convictions of the artistic sphere. However, just as in the case of De Chirico, Dix's arrangement of measuring tools was hardly intended to be an allegory in praise of the Fine Arts or metrological exactitude. The worn out shape of the studio doll,[15] moreover, should not be attributed to the depredations of moths or heavy use, but to Dix's interest in pictures by Matthias Grünewald, especially the latter's representations of the tortured body of Christ on the Cross. In this context, the blood-red measuring tool may well be an (ironic) transfer of Passion symbolism to the 'passion' of the artist's models in the studio. Dix, in fact, displayed a skeptical attitude vis-à-vis the academic figure and the classical instruments of the artistic creation of beauty, and he searched for alternative means of expression, which he found in Northern paintings of the late medieval period, especially in depictions of the suffering Christ. These non-beautiful models or prototypes of his art were an obvious choice, since, in the sense of a dilemma addressed by Friedrich Nietzsche, the Christ of the Passion, unlike the pagan gods of Greek antiquity, is just not beautiful.

Did traditional concepts of the beautiful or theories pertaining to the visual construction of beauty have any effect on the arts of the 1920s and 1930s? One does not have to search long to find that, side by side with the outspoken or implicit refutations of the traditional academic standards just cited, the period witnessed a new enthusiasm vis-à-vis Pythagorean concepts of harmony, proportion, and measure. The ex-Futurist and former Cubist Gino Severini was one of the first painters of his era to develop a profound taste for geometry as a ruling principle of art, and he propagated his new creed in 1921 in *Du cubisme au classicisme. (Esthétique du compas et du nombre),* a publication that had repercussions in all parts of Europe, notably at the Bauhaus.[17] The first generation of Italian Futurists active before World War I had declared that art museums should be destroyed, while at the same time retaining the criterion of beauty by declaring a racing car to be a thousand times more beautiful than the Nike of Samothrace.[18] In a related attitude, Le Corbusier in the early 1920s proclaimed

that the high technical standards of Greek temples defined them as "machines", comparing them with the best cars of his own era.[19] While such linear derivations of modern technology from ancient art and architecture had a provocative touch, the reference to "Greek foundations" of current consumer culture soon became fashionable in certain strata of society. Around 1930, Ernst Zoberbier's



4
ERNST ZOBERBIER / OPEL ADVERTISEMENT / CA. 1930

advertisement for Opel cars (FIG. 4) depicted the ancient statue of the *Apollo Belvedere* together with a schematic representation of the car company's most recent product, thus paralleling the golden section with the allegedly harmonious design of an automobile.[20]

The Zoberbier advertisement is a clear indicator of the fact that, on closer inspection, age-old artistic concepts of measure and proportion, even 'ideal beauty', remained important factors in the arts and popular cultures of the 1920s. There are other cases in point. For example, in 1928 the Hollywood company MGM promoted the film star Anita Page as a realization of perfect beauty (**FIG. 5**)

5
MGM ADVERTISEMENT / 1928

by comparing her body measurements as indicated in a photographic representation with the "Ideal screen type drawn from photographs of 13 leading stars".[21] In this diagram, beautiful body parts of other female film stars were indicated, but — according to the film advertisement — only Page managed to combine all such beauty features in a single figure of physical perfection.

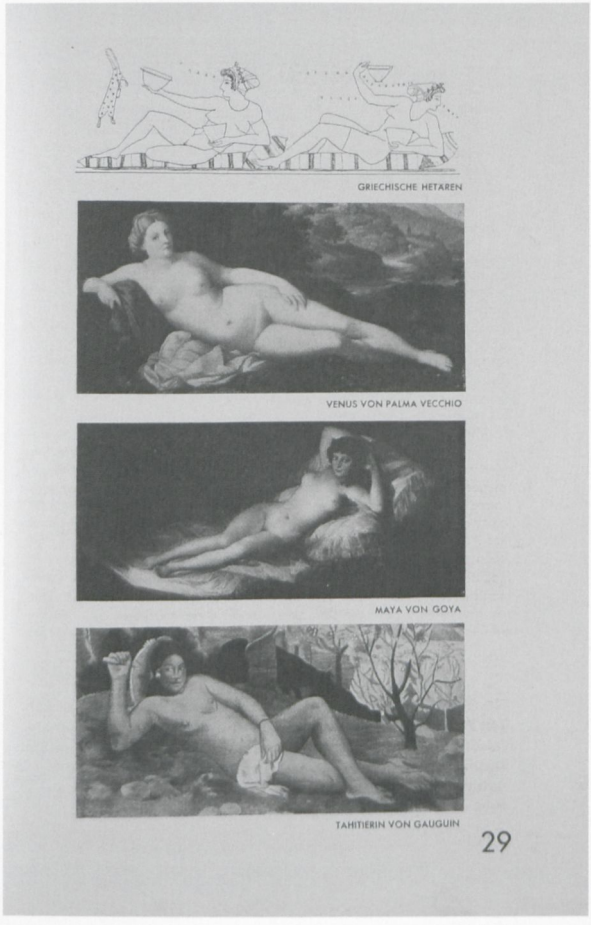
DER SCHÖNE MENSCH

In 1929, the exhibition *Der Schöne Mensch in der Neuen Kunst* (Human Beauty in Recent Art) took place in Darmstadt.[22] The cover of the catalogue (**FIG. 6**) was designed by the artist Hermann Keil (1889–1962), who was also one of the show's

6
HERMANN KEIL / COVER OF *DER SCHÖNE MENSCH IN DER NEUEN KUNST* / 1929

organizers. Keil's image is a typical example of the more progressive currents in German art and visual culture of the period in question. The orange, black, and grey shades on a white background echo the constructivist aesthetics of El Lissitzky and László Moholy-Nagy. Combined with diagonals or right angles, a decidedly contemporary letter type was chosen. The center of the cover is a

photograph of a female torso by Alexander Archipenko with extra long, footless legs.[23] The Archipenko torso is positioned in front of the flat relief-like contours of an ancient Egyptian woman. Of these two pieces of art, the first stresses the absolute modernity of the 'beauty' theme, the other, as an art historical reference, the constancy of the same phenomenon throughout history. In addition to that, the modern torso and the Egyptian relief also connected the current



7
FOUR FEMALE NUDES FROM *DER SCHÖNE MENSCH IN DER NEUEN KUNST*

fashion of representing the body as a fragment (e.g. lacking a head or arms) with older artistic traditions — in this case not with Greek or Roman art, but, rather, Egyptian works (Germany was still subject to Nefertiti mania[24]).

The Darmstadt exhibition was originally intended to be called *Der nackte Mensch in der Neuen Kunst* (The Naked Human Being in Recent Art), but in the course of its preparation the organizers appear to have lost their courage to use

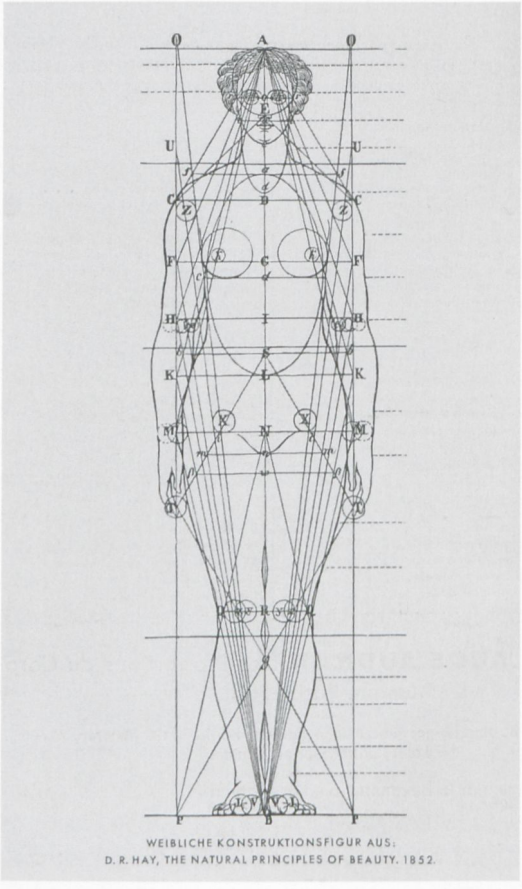
this title. Either for fear of censorship or due to a concern for greater systematic depth, they introduced a title change. Not stopping there, they also supplemented the artistic representations of nudes sent in by German and international artists with historic photos and documents on the theory and practice of "human beauty" in art through the centuries. This combination of an art show and a theoretical approach is more manifest in the catalogue than it must have been in the exhibition itself, especially since the artworks on view were limited to the media of painting and sculpture, whereas the catalogue also contains artistic photography, which was completely excluded from the actual event. In addition to the photos, the catalogue also exemplified the idea of beauty standards 'through the ages' by combining similar images from art history such as reclining female nudes from ancient Greece, by Palma Vecchio, Francisco Goya, and Paul Gauguin (FIG. 7).

Several of the artists represented in the show may have reacted to the Call for Participation under the first project title. Even though no particularly unsightly nude was exhibited, this fact may account for the great diversity of formal and stylistic approaches. Among the participating painters (Otto Dix was conspicuous for his deliberate absence), there were some veterans of German Expressionism such as Ernst Ludwig Kirchner, Otto Müller and Max Beckmann, but also representatives of the Italian *Novecento* such as Mario Tozzi and Ubaldo Oppi, and a few machine aesthetes such as Amédée Ozenfant and Willi Baumeister. The sculpture displayed ranged from a nude by Charles Despiau to an almost abstract figure by Étienne Béothy. Male nudes were outnumbered by females, while individualized images or portraits remained an exception. In the majority of cases, artists looked for the 'blueprint' of the human body. Therefore it was no accident, that someone such as Béothy participated, a Paris-based sculptor who was already preparing his book *La série d'or* (published in 1939), in which he would proclaim the golden ratio not only as the fundamental law of nature, but also as the principle on which all artistic and industrial design should be based.[25]

Klaus Wolbert, one of the few scholars to have taken notice of the Darmstadt exhibition, limited his analysis to a few aspects.[26] He stressed the international scope of the show (which included, among others, works by Marc Chagall, Auguste Herbin, and Jean Metzinger) and — given the proximity of the exhibition to the year 1933 — pointed out the conspicuously small number of racial or even strongly political undertones of the project. Regarding the art-theoretical background, he qualified the comments on "beauty" in the catalogue as a somewhat naive, largely unhistorical compilation, bound together by the then already obsolete idea of 'eternal' beauty standards.

Wolbert's claim that the exhibition represented a conventional, canon-related concept of beauty appears to be evident at first glance, but one should also acknowledge the innovative character of the Darmstadt project. Since the

Blaue Reiter exhibition in 1911, *Der Schöne Mensch* has perhaps been the most important attempt by contemporary artists in Germany to explore the various relations between art and 'non-art' in the sense of self-assessing and positioning their own activities. In the entire catalogue, as a matter of fact, there is no authoritative single definition of "beauty" that claims ultimate validity. Above all, perhaps no other self-organized exhibition by artists in the 1920s took more notice of what Theodor Adorno would a few years later call "culture industry",



WEIBLICHE KONSTRUKTIONSFIGUR AUS:
D. R. HAY, THE NATURAL PRINCIPLES OF BEAUTY. 1852.

8
DIAGRAM FROM DAVID RAMSAY HAY'S *NATURAL PRINCIPLES OF BEAUTY* AS ILLUSTRATED IN *DER SCHÖNE MENSCH IN DER NEUEN KUNST*

i.e., the ever-growing presence of quick profit imagery in mass media such as fashion and leisure magazines, advertising and the film industry. Indeed, the producers of these 'popular images', unlike most avant-garde painters or sculptors, did not hesitate to indulge in traditional normative concepts of 'perfect measures', ideal bodies and absolute beauty. Avant-garde artists active in the late 1920s could hardly overlook this trend.

'Natural' or 'canonical' standards of human beauty were a major theme in the catalogue of the Darmstadt show. Compiled and introduced by Paul Westheim, there are relevant quotations from Vitruvius[27] and Leon Battista Alberti,[28] and diagrams or proportional charts from Albrecht Dürer's *Four Books on Human Proportion* (1528), David Ramsay Hay's *Natural Principles of Beauty*[29] (1852) (**FIG. 8**) and Johann Gottfried Schadow's *Polyklet* (1834),[30] one of the most widely used manuals for artists on human growth and standard proportions in the 19th century. Famous pieces of ancient sculpture such as the *Venus de Milo* and the *Apollo Belvedere* were illustrated as eternal beauty standards. In another illustration of the Darmstadt catalogue, two contemporary men were shown studying a more or less willing young woman in a swimsuit and compar-

9
A MEASURING PROCESS / PAGE FROM *DER SCHÖNE MENSCH IN DER NEUEN KUNST*

10
"FILM FACE" / PAGE FROM *DER SCHÖNE MENSCH IN DER NEUEN KUNST*

ing her proportions to those of the ancient Venus (**FIG. 9**). Additionally, a photo of an American beauty contest demonstrated, as the catalogue asserted,[31] that attempts to define the natural standards *(Naturwert)* and a canon of beauty were still taking place. In more or less the same line, a photographic profile of a young woman defined the characteristics of the perfect "film face" (**FIG. 10**).[32] Slightly out of touch with the rest of the catalogue, but closely related to contemporary Weimar culture, an article by the sports apostle Hans Suren promoted physical education as a means of individually achieving an ideal figure.[33] In keeping with the sports and gymnastics movement of the time, he demonstrated that physical beauty consists in the continuous process of its acquisition, i.e. in a permanent performative act of self-beautification.

In the scant research on the 1929 exhibition, the picture credit in the lower margin of several illustrations in the Darmstadt catalogue, "Klischee: Das Magazin", has not yet stirred any scholarly interest. *Das Magazin,* in fact, was one of the most widely read illustrated journals published in the days of the Weimar Republic, a periodical intended for a liberal, 'modern' clientele with a penchant for light intellectual entertainment and the American Way of Life. In the July 1928 issue of *Das Magazin,* the article "Schönheit nach Maß" (Beauty to Measure) can be found (**FIG. 11**).[34] It revolves around the (probably) fictional character of Kiki, a young woman whose likeness is given in a photo of a fashionable girl hold-


Schönheit nach Mass

Kiki weinte einen ganzen Tag lang. Bekam einen Tobsuchtsanfall, verschob fünf Rendezvous . . . Und seither ist Kiki wie verhext. Man sieht sie keine Minute das Tages stille sitzen, sie liegt nie mehr am Strande, um zu dösen und sich von der Sonne braun braten zu lassen . . . Und all das nur, weil einer ihrer Verehrer an der See ihr gestanden hatte, daß sie schön sei wie — die Venus von Milo!

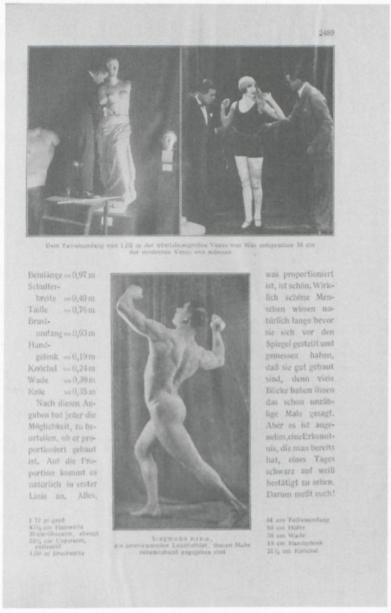
Die Venus von Milo! Entsetzlich — diese Hüften! Von dem Taillenumfang gar nicht zu reden! Kiki hatte sie noch ganz genau vor Augen, wie sie sie im Louvre gesehen hatte: riesengroß, schön, harmonisch, aber unmöglich! Jedenfalls für eine moderne Frau! Und nun versuchte Kiki sich zu einem Garçonnetyp hinunterzutrainieren . . .

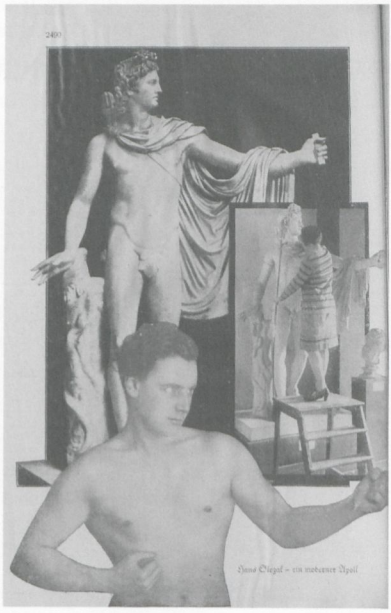
Schön wie die Venus von Milo! Nein, danke,

11 / 12 / 13
PAGES FROM THE "BEAUTY TO MEASURE" ARTICLE IN *DAS MAGAZIN* / 1928

ing a tape measure in her hand. According to the article, one of Kiki's admirers compared her beauty to that of the *Venus de Milo.* To her, this compliment sounded like an insult: "Look at these hips! Not to mention the waistline".[35] At first glance, such a reaction reads as a fundamental critique of the traditional ideals of female beauty. And, indeed, Kiki's aversion to the 'old-fashioned' beauty standards as exemplified by the *Venus de Milo* needs to be seen in the context of the androgynous ideal of the 1920s, the *garçonne.* Yet, as far as Kiki was concerned, her own efforts to reach that new ideal were short-lived. Much to her relief, she received the first prize for slenderness in a beauty contest, and at about the same time another of her male friends who had some mathematical compe-

tence converted the dimensions of the *Venus de Milo,* a sculpture more than two meters high, to Kiki's own body size. He found that her proportions were almost identical to those of the sculpture in the Louvre — from then on, she was quite satisfied with being compared to the classical Venus (**FIG. 12**).[36] For the time being (at least according to *Das Magazin*), old and contemporary beauty standards were thus reconciled. In the same article, another famous piece of sculpture was proposed as a standard for the male body: the *Apollo Belvedere.* In an illustration (**FIG. 13**), a woman applies a tape measure to this ancient exemplar of male beauty (or, rather, a cast), and a contemporary athlete is shown right under that image as a "modern Apollo". The article's closing remark is: "Proportions matter more than anything else! All things proportioned are beautiful."[37]

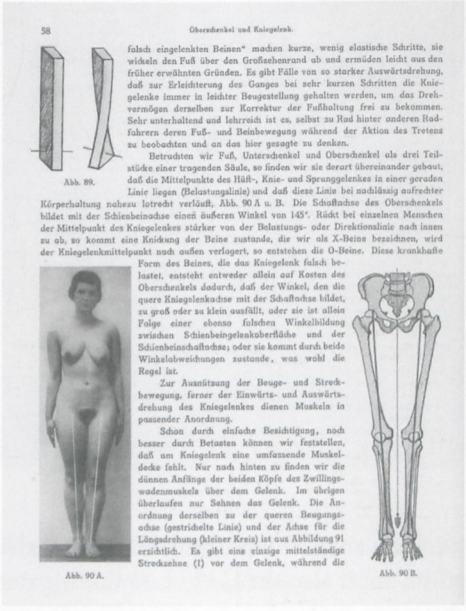




Popular imagery can be analyzed in terms of its immediate commercial, social or political function, but it also sheds light on the 'high' culture or the arts in general of a particular period. One aspect of the "Schönheit nach Maß" article is especially obvious: concepts of measure and proportion were an important element of contemporary discourses on physical attraction or beauty, and many of the concepts in question closely resemble those of the previous centuries. It looks as if the cultural mainstream of the 1920s never turned away from these 'outdated' ideas, whereas a lot of avant-garde artists (as exemplified by the participants of the Darmstadt show) began to return to them. The enthusiasm for 'natural' beauty standards, needless to say, was not shared by all artists con-

nected with the 1929 event. In the catalogue of the Darmstadt exhibition, there is a section with statements by contemporary artists in which more nuanced opinions regarding ideal figures or artistic "beauty" than those of the historic authorities already cited are pronounced. For example, the Expressionist painter Reinhold Ewald criticized the concept of "eternal" proportions in a material sense and pointed out that Dürer's pedantry in questions of measure and scale would never do justice to the dynamics of the natural world.[38]

When analyzing the exhibition *Der Schöne Mensch* in a larger context, one is hardly surprised to find that the more 'progressive' anatomy books used for the education of artists in the 1920s no longer contained references to ancient sculpture, canonical modules or fixed formulas for the construction of beauty. It is enough to cite just one example, the *Plastische Anatomie* (Plastic Anatomy) of Siegfried Mollier which — despite its claim to teach the representation of the human body to future artists — did away with all former artistic ideals and more than anything resembles a medical textbook (**FIG. 14**).[39] However, both in


58 Oberschenkel und Kniegelenk.

falsch eingelenkten Beinen" machen kurze, wenig elastische Schritte, sie wickeln den Fuß über den Großzehenrand ab und ermüden leicht aus den früher erwähnten Gründen. Es gibt Fälle von so starker Auswärtsdrehung, daß zur Erleichterung des Ganges bei sehr kurzen Schritten die Kniegelenke immer in leichter Beugestellung gehalten werden, um das Drehvermögen derselben zur Korrektur der Fußhaltung frei zu bekommen. Sehr unterhaltend und lehrreich ist es, selbst zu Rad hinter anderen Radfahrern deren Fuß- und Beinbewegung während der Aktion des Tretens zu beobachten und an das hier gesagte zu denken.

Abb. 89.

Betrachten wir Fuß, Unterschenkel und Oberschenkel als drei Teilstücke einer tragenden Säule, so finden wir sie derart übereinander gebaut, daß die Mittelpunkte des Hüft-, Knie- und Sprunggelenkes in einer geraden Linie liegen (Belastungslinie) und daß diese Linie bei nachlässig aufrechter Körperhaltung nahezu lotrecht verläuft, Abb. 90 A u. B. Die Schaftachse des Oberschenkels bildet mit der Schienbeinachse einen äußeren Winkel von 145°. Rückt bei einzelnen Menschen der Mittelpunkt des Kniegelenkes stärker von der Belastungs- oder Direktionslinie nach innen zu ab, so kommt eine Knickung der Beine zustande, die wir als X-Beine bezeichnen, wird der Kniegelenkmittelpunkt nach außen verlagert, so entstehen die O-Beine. Diese krankhafte Form des Beines, die das Kniegelenk falsch belastet, entsteht entweder allein auf Kosten des Oberschenkels dadurch, daß der Winkel, den die quere Kniegelenkachse mit der Schaftachse bildet, zu groß oder zu klein ausfällt, oder sie ist allein Folge einer ebenso falschen Winkelbildung zwischen Schienbeingelenkoberfläche und der Schienbeinschaftachse; oder sie kommt durch beide Winkelabweichungen zustande, was wohl die Regel ist.

Zur Ausnützung der Beuge- und Streckbewegung, ferner der Einwärts- und Auswärtsdrehung des Kniegelenkes dienen Muskeln in passender Anordnung.

Schon durch einfache Besichtigung, noch besser durch Betasten können wir feststellen, daß am Kniegelenk eine umfassende Muskeldecke fehlt. Nur nach hinten zu finden wir die dünnen Anfänge der beiden Köpfe des Zwillingswadenmuskels über dem Gelenk. Im übrigen überlaufen nur Sehnen das Gelenk. Die Anordnung derselben zu der queren Beugungsachse (gestrichelte Linie) und der Achse für die Längsdrehung (kleiner Kreis) ist aus Abbildung 91 ersichtlich. Es gibt eine einzige mittelständige Strecksehne (1) vor dem Gelenk, während die

Abb. 90 A.

Abb. 90 B.

14
PAGE FROM SIEGFRIED MOLLIER'S *PLASTISCHE ANATOMIE* / 1924

the education of artists and in the popular 'learning how to draw' textbooks for *dilettanti,* the didactic means and educational aims were not as clearly defined as these 'progressive' authors preferred. In Germany and elsewhere, the authority of plaster casts and proportional charts remained considerable, and this situation changed little until the 1950s. In textbooks on fashion, comics and web design, 'natural measures' and fixed proportions of the human figure can still be

found today. Not surprisingly, the Surrealists (who were almost completely absent from the Darmstadt show) mocked the eternal beauty standards of the human figure — one of these was Max Ernst who, in a cover design for an English edition of the poems of Paul Eluard, reproduced and 'reworked' a proportional chart that he must have found in a book on artistic or medical anthropometry.[40] However, artists such as Ernst were dealing with concepts and convictions that, as they saw, were quite alive, and it would be a simplification to interpret (and underestimate) these beauty concepts as ultimate ramifications of 19th-century academic classicism.

Only against this complicated cultural background can the artistic practice and theories of the avant-garde 'champion' of the human figure in post-World War I Germany, Oskar Schlemmer, be fully understood. None other than Schlemmer had the last word in the artists' statements collected in the Darmstadt catalogue: "Unless the signs deceive us, a renaissance of the human figure in art is close. After the Futurists in their manifestos have sworn death to the moon and even death to the nude in the arts; [...] after Verism and Neue Sachlichkeit represented human beings in a Biedermeier manner (*verbiedermeiert*) or with a penetrating naturalism; after such a course of development, the ideals which guided a Hans von Marées throughout his life, the ideals which cultivate the high style in art, should actually be revived. Their highest object will always be man, i.e. man as represented by the means of artistic beauty (*der kunstschöne Mensch*). These formations will always be, in Goethe's sense, 'antique' (*antikisch*), arising from the ideal symmetry of abstraction, measure and rule on the one hand and of nature, feeling, idea on the other. An exhibition entitled 'Der Schöne Mensch' will have to take special care to represent man as a product of art, as a likeness (*Gleichnis*) created by the means of art, i.e. form and color, that represents a special world, incomparable to the beauty of photography or the mere beauty of nature".[41]

Putting Schlemmer's statement in other terms, he tried to define his own position by clearly distinguishing between art on the one hand and 'popular' or 'natural' imagery on the other. Since this distinction was not one of mere traditionalism, he did not wish to return to the inflexible beauty concepts that had prevailed prior to Hildebrand and Fiedler, and it was not by chance, that he mentioned Hildebrand's artist-friend Hans von Marées. It is unclear whether Schlemmer, when writing his statement, was aware of the fact that the authors of the Darmstadt catalogue were planning to illustrate proportional charts and similar historic indicators of 'eternal beauty', but it seems unlikely. If he had been asked to comment on the published catalogue, Schlemmer would probably have pointed out that the combination of images of contemporary beauty contests and age-old diagrams representing the 'natural principles of beauty' was irrelevant for his own concept of the beautiful, as neither had any bearing upon the beauty of art.

If seen from this angle, Schlemmer's text not only indicates the tensions between 'high' and 'low' in the arts and visual cultures of ca. 1930, it also echoes the anthropological approach of the course that he himself had devised for his Bauhaus teaching, the "Menschenlehre". This course was meant to be much more than just an anatomy lesson or an introduction to the academic principles of figure creation; it was, rather, the ambitious attempt at a synthesis of the physical and spiritual natures of man. Schlemmer's famous drawing *Mensch im Ideenkreis* (Man in the Circle of Ideas) (**FIG. 15**) was intended to describe the basic capacities

15
OSKAR SCHLEMMER / *DER MENSCH IM IDEENKREIS* / 1928–29
DRAWING

of the human body and, at the same time, to convey a generalized image of man, metaphysical and free of all contingencies, in a word: a-historical.[42] The fact that the human figure in his *Mensch im Ideenkreis* is shown running, i.e. moving in space not unlike a "Human Figure in Motion" by Eadweard Muybridge, clearly distances him from the upright and immobile figures as represented in the anatomical charts of the old art academies. Yet Schlemmer's artistic quest for the "allgemeingültiger Typus der Gestalt"[43] (universally valid type of form) was undertaken in a spirit not unlike that of the early modern classicists upon whose convictions the first art academies were built, i.e. their concepts of an eternal, ideal beauty of man.[44]

It goes without saying that in the time span between Oskar Schlemmer and Rebecca Horn a lot of new art has been produced and a great many changes in culture and society have occurred. The word "changes" does not only refer

to the racial and eugenic measuring practices in the Nazi period or the almost complete abandonment of the 'figure' in Western avant-garde art of the 1950s or even the 'pure proportions' of the cubic boxes created by American Minimalists such as Donald Judd or Sol LeWitt in the 1960s. The *Messkasten* by Rebecca Horn (FIG. 1), if considered in all its complexities, contains references to both the artistic tradition of measuring the human figure and the concepts of the body current in 1970. It therefore points to the tensions between the physical self and the norms of artistic creation that more often than not reflect gender-specific, ethical or racial norms outside the artistic sphere. Whatever Kiki was told, there are no 'natural proportions' or 'natural values' of the human figure, each measuring of a body, artistic or not, already being conditioned by the parameters chosen and the assumptions or intentions of the person performing it. A measuring process is a social act. Art and art history remain good places for the critique of such acts.

NOTES

1 See Anette KURUSZYNSKI, "'Und verstehe die Freiheit, aufzubrechen, wohin er will'. Autonomie und Befreiung im Schaffen von Rebecca Horn", in: Rebecca Horn, *Bodylandscapes. Zeichnungen, Skulpturen, Installationen, 1964–2004,* Ostfildern-Ruit: Hatje Cantz, 2004, pp. 136–143, here pp. 138–139.

2 See the examples cited in Jane Andrews AIKEN, "Leon Battista Alberti's System of Human Proportions", in: *Journal of the Warburg and Courtauld Institutes,* VOL. 43, 1980, pp. 68–96.

3 See Jürgen FREDEL, "Ideale Maße und Proportionen. Der konstruierte Körper", in: *Die Beredsamkeit des Leibes. Zur Körpersprache in der Kunst,* edited by Ilsebill BARTA FLIEDL and Christoph GEISSMAR, Salzburg and Vienna: Residenz-Verlag, 1992, pp. 11–42.

4 See Eckhard LEUSCHNER, "Proportion", in: *Lexikon Kunstwissenschaft. Hundert Grundbegriffe,* edited by Stefan JORDAN and Jürgen MÜLLER, Stuttgart: Reclam, 2012, pp. 280–283.

5 See Eckhard LEUSCHNER, "Rules and Rulers. Robert Morris, Canonical Measures and the Definition of Art in the 1960s", in: *Münchner Jahrbuch der Bildenden Kunst,* VOL. 60, 2009, pp. 139–160.

6 See Hubertus GASSNER, "Komposition: Hyperbeln — Symmetrien und Gitterstrukturen — Rhythmische Folgen — Bildpaare und Serien", in: *Caspar David Friedrich. Die Erfindung der Romantik,* edited by Hubertus GASSNER, Munich: Hirmer, 2006, pp. 271–289, here pp. 272–273.

7 See especially Adolf von HILDEBRAND, *Das Problem der Form in der bildenden Kunst,* Strassburg: J. H. Ed. Heitz (Heitz & Mündel), 1893.

8 Erwin PANOFSKY, "Die Entwicklung der Proportionslehre als Abbild der Stilentwicklung", in: *Monatshefte für Kunstwissenschaft,* VOL. 14, 1921, pp. 188–219. Quoted after: Erwin PANOFSKY, "The History of the Theory of Human Proportions as a Reflection of the History of Styles", in: PANOFSKY, *Meaning in the Visual Arts: Papers in and on Art History,* Garden City, NY: Doubleday Anchor Books, 1955, pp. 55–107, here p. 55.

9 See Uwe M. SCHNEEDE, *Umberto Boccioni,* Stuttgart: Gerd Hatje, 1994, pp. 111–113.

10 Herbert Molderings, *Kunst als Experiment. Marcel Duchamps "3 Kunststopf-Normalmaße"*, Munich and Berlin: Deutscher Kunstverlag, 2006.

11 Elena Pontiggia, "L'idea del classico in Margherita Sarfatti e Massimo Bontempelli", in: *Arte e letteratura. Dal futurismo ad oggi*, edited by Vittorio Fagone and Daniela Galante, Bergamo: Lubrina, 1998, pp. 65–71.

12 See Ingrid Leonie Severin, *Baumeister und Architekten. Studien zur Darstellung eines Berufsstandes in Porträt und Bildnis*, Berlin: Gebr. Mann, 1992.

13 Mario Sironi cited in *Piero della Francesca e il Novecento*, edited by Maria Mimita Lamberti and Maurizio Fagiolo dell'Arco, Venice: Marsilio, 1991.

14 On the painting by Dix see *Grünewald in der Moderne*, edited by Brigitte Schad and Thomas Ratzka, Cologne: Wienand, 2003, p. 54.

15 The doll might also refer to fetish practices in the manner of Kokoschka's life-sized Alma doll. See *Oskar Kokoschka und Alma Mahler: Die Puppe. Epilog einer Passion*, Frankfurt am Main: Städtische Galerie im Städel, 1992.

16 For Nietzsche's view of a fundamental conflict between the Christian religion and all concepts of beauty see, among others, Hans Maier, "Mensch und Übermensch. Nietzsche und das Christentum", in: *Wagner — Nietzsche — Thomas Mann. Festschrift für Eckhard Heftrich*, edited by Heinz Gockel, Michael Neumann, and Ruprecht Wimmer, Frankfurt am Main: Vittorio Klostermann, 1993, pp. 83–96.

17 Piero Pacini, "Gino Severini: la riscoperta della Divina Proporzione e del Numero d'Oro", in: *Figura umana. Normkonzepte der Menschendarstellung in der italienischen Kunst von 1919 bis 1939*, edited by Eckhard Leuschner, Petersberg: Michael Imhof, 2012, pp. 68–79.

18 Manfred Hinz, *Die Zukunft der Katastrophe. Mythische und rationalistische Geschichtstheorie in italienischen Futurismus*, Berlin: De Gruyter, 1985, p. 64 and passim.

19 Le Corbusier, *Vers une architecture*, edited by Jean-Louis Cohen, Paris: Flammarion, 2005, pp. 106–107. (First as Le Corbusier-Saugnier, *Vers une architecture*, Paris: G. Cres, [1923]).

20 On Zoberbier's advertisement design, see Esther Sophia Sünderhauf, *Griechensehnsucht und Kulturkritik. Die deutsche Rezeption von Winckelmanns Klassizismus 1840–1945*, Berlin: Akademie Verlag, 2004, pp. 254–255.

21 For the photo of Anita Page as the "ideal screen type", see Robert Dance and Bruce Robertson, *Ruth Harriet Louise and Hollywood Glamour Photography*, Berkeley and Los Angeles: University of California Press, 2002, p. 129.

22 *Der Schöne Mensch in der Neuen Kunst*, edited by the Interessengemeinschaft fortschrittlicher Künstler Hessens, Darmstadt: Mathildenhöhe, 1929.

23 According to the 1929 catalogue, this work was not included in the exhibition (the photo credit was for the Flechtheim Gallery in Berlin). See the catalogue entry for Archipenko's torso by Christa Lichtenstern in *Canto d'amore. Klassizistische Moderne in Musik und bildender Kunst, 1914–1935*, Bern: Kunstmuseum Basel, 1996, pp. 152–153.

24 For the early reception of the bust of Nefertiti — on display in Berlin since 1923 — see Claudia Breger, "Die Berliner Büste der Nofretete. Imperiale Phantasien im deutschen archäologischen Diskurs des 20. Jahrhunderts", in: *Der Körper der Königin. Geschlecht und Herrschaft in der höfischen Welt*, edited by Regina Schulte, Frankfurt am Main: Campus, 2002, pp. 279–301.

25 Etienne Béothy, *La série d'or,* Paris: Chanth, 1939. On the book, see Alfred Meurer, *Der Bildhauer Etienne Béothy. Werk und Ästhetik,* Weimar: VDG, 2003, pp. 74–86, and Claire Barbillon, *Les canons du corps humain au XIXe siècle. L'art et la règle,* Paris: Odile Jacob, 2004, pp. 263–273.

26 Klaus Wolbert, "Der Schöne Mensch in der Neuen Kunst. Internationale Ausstellung", in: *Die Darmstädter Sezession 1919–1997. Die Kunst des 20. Jahrhunderts im Spiegel einer Künstlervereinigung,* edited by Sabine Welsch and Klaus Wolbert, Darmstadt: Institut Mathildenhöhe, 1997, pp. 168–175.

27 *Der Schöne Mensch in der Neuen Kunst,* p. 31.

28 Ibid., p. 32.

29 David Ramsay Hay, *The Natural Principles of Beauty As Developed in the Human Figure,* Edinburgh: William Blackwood and Sons, 1852 · *Der Schöne Mensch in der Neuen Kunst,* p. 36.

30 Johann Gottfried Schadow, *Polyklet oder von den Massen des Menschen,* Berlin: published by the author, 1834 · *Der Schöne Mensch in der Neuen Kunst,* p. 37.

31 *Der Schöne Mensch in der Neuen Kunst,* p. 37: „Das starke Interesse für die menschliche Schönheit als Naturwert drückt sich heute auch in den Versuchen aus zu Normalmaßen und einem Kanon zu gelangen. Ihnen dienen jene Schönheits-Konkurrenzen, wie sie besonders Amerika liebt und veranstaltet."

32 Ibid., p. 39.

33 Hans Suren, "Schönheit des Körpers", in: *Der Schöne Mensch in der Neuen Kunst,* pp. 15–17, and idem, "Körpertypen und Körperbildung", ibid., pp. 18–20.

34 Author unknown, "Schönheit nach Maß", in: *Das Magazin,* VOL. 47, July 1928, pp. 2485–2490.

35 Ibid., p. 2485: „Die Venus von Milo! Entsetzlich — diese Hüften! Von dem Taillenumfang gar nicht zu reden! Kiki hatte sie noch ganz genau vor Augen, wie sie sie im Louvre gesehen hatte: riesengroß, schön, harmonisch, aber unmöglich! Jedenfalls für eine moderne Frau! Und nun versuchte sich Kiki zu einem Garçonnetyp hinunterzutrainieren".

36 Ibid., pp. 2487–2488: „Wie würde sie denn eigentlich aussehen, wenn sie 2,02 m groß wäre? Sie rennt zu einem Freunde — Mathematik war immer ihre schwächste Seite gewesen — und lässt es sich ausrechnen. Ihr wurde schwarz vor Augen — es waren die Maße der Venus von Milo".

37 Ibid., p. 2489: „Auf die Proportion kommt es in erster Linie an! Alles, was proportioniert ist, ist schön. Wirklich schöne Menschen wissen natürlich lange bevor sie sich vor den Spiegel gestellt und gemessen haben, daß sie gut gebaut sind, denn viele Blicke haben ihnen das schon unzählige Male gesagt. Aber es ist angenehm, eine Erkenntnis, die man bereits hat, eines Tages schwarz auf weiß bestätigt zu sehen. Darum messt euch!"

38 *Der Schöne Mensch in der Neuen Kunst,* p. 53 (R. Ewald): „Solche Proportionen (sc. der antiken Ägypter und Griechen) sind nicht örtlichmessender Natur, auch nicht Umformungen oder Stilisierungen gemessener Orte des Stoff-(Modell-)Körpers, auch nicht Dürersche Pedanterie- und Geometrie-Konflikte, sondern an ihrer Entstehung ist das fließende Leben an sich schuld, das sich im Kunstphantom festigt."

39 Siegfried Mollier, *Plastische Anatomie. Die konstruktive Form des menschlichen Körpers,* Munich: J. F. Bergmann, 1924.

40 Max Ernst, "Thorns of Thunder" (1936), illustrated in Werner Spies, *Max Ernst Collages: the Invention of the Surrealist Universe,* translated by John William Gabriel, New York: Abrams, 1991,

fig. 529 · See also Ernst's painted fusions of human and animal forms such as "Figure anthropomorphe" (1931), illustrated in *Max Ernst. Retrospektive zum 100. Geburtstag,* edited by Werner Spies, Munich: Prestel, 1991, p. 162.

41 *Der Schöne Mensch in der Neuen Kunst,* p. 54 (Oskar Schlemmer): „Wenn die Zeichen nicht trügen, so bereitet sich eine Renaissance der Menschendarstellung in der Kunst vor. Nachdem die Futuristen damals in ihren Manifesten Tod dem Mondschein und auch Tod dem Nackten in der Kunst geschworen hatten; [...] nachdem sodann Verismus und Neue Sachlichkeit den Menschen zwar darstellten, aber verbiedermeiert oder in penetranter Naturalistik; — so müssten nach solchem Entwicklungsverlauf eigentlich notwendigerweise die Ideale wiederaufleben, die einen Hans v. Marées ein Leben lang beherrschten, die Ideale, die sich um den hohen Stil in der Kunst bemühen. Deren höchster Gegenstand wird immer der Mensch, der kunstschöne Mensch sein. Es werden immer Formungen sein, die im Goetheschen Sinne ‚antikisch' sind, Schöpfungen, entsprungen aus der Verbindung und aus dem idealen Gleichmaß von Abstraktion, Maß, Gesetz einerseits, andrerseits aus Natur, Gefühl, Idee. Eine Ausstellung ‚Der schöne Mensch' wird bedacht sein müssen, den Menschen als Produkt der Kunst aufzuzeigen, als das mit den Mitteln der Kunst, aus Form und Farbe geschaffene Gleichnis, das eine Sonderwelt repräsentiert, unvergleichbar dem bloß Fotografie- oder bloß Naturschönen".

42 On Schlemmer's "Menschenlehre", see Oskar Schlemmer, *Der Mensch. Unterricht am Bauhaus. Nachgelassene Aufzeichnungen,* Mainz: Florian Kupferberg, 1969 · Birgit Sonna, *Oskar Schlemmer. Der neue Mensch. Körperkult und Lebensreform,* Ph.D. Thesis, Regensburg 1992, especially pp. 167–171 and 230–232 · Rainer K. Wick, "Schlemmers Menschenbild", in: Wick, *Bauhaus. Kunst und Pädagogik,* Oberhausen: Athena, 2009, pp. 297–312.

43 Karin von Maur, *Oskar Schlemmer,* vol. 1, Munich: Prestel, 1979, p. 74.

44 It is (involuntarily?) ironic that the picture in the picture on the wall to the left represents an academic, immobile figure — Schlemmer inscribed it with the title "art".

IMAGES

Rebecca Horn, *The Glance of Infinity,* Zurich, Berlin, and New York: Scalo, 1997, p. 54: fig. 1 (© VG Bild-Kunst, Bonn 2014) · *Sironi. Mario Sironi (1885–1961),* edited by Jürgen Harten and Jochen Poetter, Cologne: DuMont 1988, cat. no. 86: fig. 2 (© VG Bild-Kunst, Bonn 2014) · *Grünewald in der Moderne,* edited by Brigitte Schad and Thomas Ratzka, Cologne: Wienand, 2003: fig. 3 (© VG Bild-Kunst, Bonn 2014) · *Kunst! Kommerz! Visionen!: Deutsche Plakate 1888–1933,* edited by the Deutsches Historisches Museum, Heidelberg: Edition Braus 1992, p. 523: fig. 4 · Robert Dance and Bruce Robertson, *Ruth Harriet Louise and Hollywood Glamour Photography,* Berkeley and Los Angeles: University of California Press, 2002, p. 129: fig. 5 · *Der Schöne Mensch in der Neuen Kunst,* Darmstadt: Mathildenhöhe, 1929, Cover: fig. 6, p. 29: fig. 7, p. 36: fig. 8, p. 38: fig. 9, p. 39: fig. 10 · *Das Magazin,* vol. 47, 1928, pp. 2485: fig. 11, p. 2488: fig. 12, p. 2490: fig. 13 · Siegfried Mollier, *Plastische Anatomie. Die konstruktive Form des menschlichen Körpers,* Munich: J. F. Bergmann, 1924, p. 58: fig. 14 · *Bauhaus,* edited by Jeannine Fiedler and Peter Feierabend, Cologne: Könemann, 1999, p. 285: fig. 15