RULES AND RULERS

ROBERT MORRIS, CANONICAL MEASURES AND THE DEFINITION OF ART IN THE 1960S

by Eckhard Leuschner

What if rules, rather than explaining anything, are what is to be explained?

Robert Morris

Ever since the Renaissance, anatomical and anthropometric research undertaken by artists resulted in »human standard measures«, many of which were made available in publications for art students, artists and dilettanti on How to Draw the Human Figure. These collections of models and instructions never existed independently from contemporary scientific or medical publications dealing with the vaverage human body. In art, however, the human figure did not just designate the outer appearance or shape as opposed to the body's physical totality but, rather, the sum of professional instructions on the visual representation of human beings in line with the standard measures, postures and proportions taught at art schools and art academies. Any characterisation of these instructions or conventions as mere rules of craft would oversimplify the discourse on the figures, as it was based on a conceptual approach connecting assumptions about the rational nature of reality with methods of visually representing or reconstructing that reality.2 Nor did these instructions amount to the definition of a single sideals, because they also included body types and complexions, e.g. in the Four Books on Human Proportion by Albrecht Dürer, and visually codified emotions, e.g. in the Expressions of the Passions by Charles Le Brun. However, as long as textbooks and compilations of anatomy, proportion and physiognomics for artists claimed to teach fixed or natural standards of the human form and its representations, their normative influence on artistic practice and art appreciation was considerable.3

The last three decades have seen the publication of an enormous volume of scholarly articles and books on all aspects of the human body in art and visual culture, whereas comparatively little has been written on the human figure. Indeed, even the small group of authors who take both terms into consideration appear to have had only vague ideas as to the terminological differences. As a result, a systematic study of the various connotations and/or possible

shifts in the meaning of figure (figura, Figure) in relation to body (corpus, corpo, corps, Körper) in Western art and art theory is still lacking.

It was observed a few years ago that "artists no longer refer to figure drawing but to the body", which is conceived as a cultural construct, inscribed with social, sexual and gendered meaning". This statement is not, however, correct, as many artists and a lot of recent textbooks used in art education, fashion drawing and digital design continue to rely on the figure. The, something has clearly changed, and the prestige of the figure in art is not as high today as it was two generations ago. This is something that can be ascribed only partly to the predilection displayed by Western postwar-artists and critics for mon-representationals or abstract works, as the terminological and conceptual shift has also affected the more recent production of what previously would have been called figural representations, i.e. images of human bodies, body parts or hybrids.

What, then, are deemed to be the advantages of the abody over the affigure in art and art interpretation? According to theories developed in the last decades, by speaking of the abody represented, i.e. the corporal sign, rather than of the affigure, we can avoid the seeming neutrality and adisinterested essentiality of the latter term. Leaving aside the question of whether there ever was or can be a purely aphysical body, i.e. a body totally unrelated to concepts or contexts, it is now a widely shared conviction that representations of bodies – artistic or not – are fraught with ideology and have avery real effects upon the physical body, especially in regard to determining what is held to be anormal, as a result, the political and social dimensions of all such representations have become unavoidably obvious.

Not surprisingly, the terminological shift from sfigures to body in art and art theory appears to have occurred in the 1960s. It is less clear, however, who or what was responsible for that shift, in what manner the shift took place and to what degree it influenced contemporary works of art (or, for that matter, to what degree works of art contributed to the shift). The considerable uncertainty over the process in question may well be related to the historiographic parameters of

current research. Many studies on social, sexual and gendered meanings of the body and its representations ignore the deep-rooted claims of the visual arts to methodological autonomy. In doing so, they fail to give a full picture of the developments, nor can they account for the raison d'etre of certain key works of art produced during the period. Rather than merely referring the visual arts to other (political, social or economic) discourses, the arts also need to be analysed in terms of specific normative traditions, as defined by the conventions of their production or making — it will immediately become clear that this approach is far from formalistic or a mere matter of craft.

In what follows, a case study of several works from the 1960s by Robert Morris and some of his colleagues will be used to shed light on the reasons for the implicit or explicit switch from figure to body in art. Most of these works are related to measuring practices in and outside the artistic sphere. Concepts of measure and scale in connection with the human figure — figure in the sense of the sum of professional rules for the visual construction and/or representation of the body — featured prominently among artistic conventions well into the second half of the twentieth century. The aesthetic consequences of how artists personally dealt, or struggled, with these conventions between ca. 1960 and 1970 have not yet received the full attention they deserve.

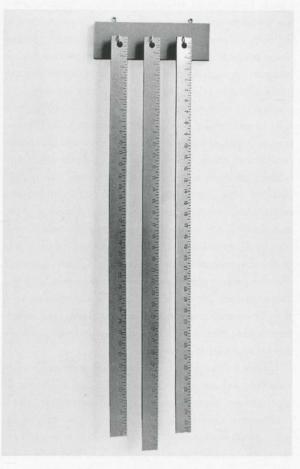
As will be demonstrated, discourses about measuring practices in art prepared, accompanied and announced the general conceptual shift from ofigure to obody. From the distance of half a century, it is possible to reconstruct the ways in which artists like Robert Morris, Jasper Johns, Andy Warhol and Bruce Nauman reflected on cultural and social standards symbolised or exemplified by canonical rules of art. This process of reflection resulted in several remarkable works of art and contributed to the revision of some of the most elementary principles on which artistic claims to general recognition and autonomy had been based since the Renaissance.

Robert Morris, Art and Art History

Few twentieth century artists have questioned the institutions of art, art theory, and art appreciation with such originality as Robert Morris. The best known example of Morris's confrontations with art history is the >21.3¢ lecture performance he gave in 1964 at a small New York theatre. He dressed in what must have been the current fashion of art historians, stepped to the podium and read Erwin Panofsky's essay >Concerning the Problem of Description

and Interpretation of Meaning in Works of the Fine Arts. His lecture was echoed by a tape recording of the same text that moved in and out of synchronisation. When the speaker filled his water glass, the sound was heard moments later from the tape. Even though the performance displayed the artist's dissatisfaction with structuralist art history as propagated by one of its leading scholars, Morris demonstrated that he was acquainted with methodological questions of art interpretation. The preparation of his 1965/66 master's thesis on Brancusi's sculptures and their plinths (>Form Classes in the Work of Constantin Brancusi-, unpublished) must have further familiarised him with current trends in art history and art criticism.

Several of Robert Morris's early works are characterised by the inclusion or representation of rulers. Most of these works were made in the first half of the 1960s, i.e. at a time when the expression Minimal Art had not yet been coined, but when all artists known today under this label had begun



1 Robert Morris, Three Rulers (Yardsticks), 1963. Estate of Harry N. Abrams

to produce in their characteristic manner. 12 Between 1960 and 1964, Morris employed a wide range of different materials and media for his art, producing, among other things, adaptations of Duchamp's Ready-mades, theatrical pieces or performances and a few large-scale objects such as >Untitled (Two Columns) (fig. 5). However, in more than two dozen installations and drawings produced by Morris between 1961 and 1964 rulers, rods, yardsticks and other measuring devices feature prominently.¹³ Some of these pieces consist of little else than rulers or casts of rulers, while several others have a more elaborate structure. Yet, even the simples ruler pieces are more complex in shape and meaning than they appear to be at first sight. For example, the rulers in Three Rulers (Yardsticks) (fig. 1) of 1963 are of different lengths, but all have scales that measure exactly thirty-six inches.14 Standardised relations of scale are suddenly turned over to individual perception and subjectivity, or - as Maurice Berger put it -- wthe concept of measure becomes our percept of it«.15 In Morris's >SWIFT NIGHT RULER«, the ruler placed under the somewhat unclear but poetic inscription can be slid back and forth. 16 The erotic connotations of this structure have been pointed out by all interpreters. The artist not only made use of the double sense of ruler as Measuring device and Sovereign or Monarch but also stressed the phallic symbolism of the object and paralleled measuring standards with sexual power. This aspect of Morris's rulers is even more evident in Juntitled (Cock/ Cunt) of 1963, a work consisting of a painted rectangular piece of wood on a painted wood base.¹⁷ While the mount is inscribed »CUNT«, the piece marked »COCK« is found to consist of two measuring devices hinged together.

There is a growing awareness that the results of each measuring process – artistic, scientific or other – are conditioned by the parameters chosen, the person or object measured, the person measuring and the visual means by which measuring results are noted or represented. The objectivity of scientific representation is a myth, as is the objectivity of measuring devices, since they are as much conditioned by their physical shape or scales as by the textual or graphic representation of the results obtained from the application of a device. Whoever defines (scientific or artistic) measuring standards has the power to influence and dominate the objects or persons measured. Measuring is a means of acquiring and exerting power. In this sense, rulers quite literally are Rulers.

Although a detailed study of rulers and similar measuring devices in twentieth century art is still lacking,¹⁹ one can safely assume that Morris's ruler pieces were primarily



2 Marcel Duchamp, Trois Stoppages Étalon, 1913–1952. New York, The Museum of Modern Art

inspired by Marcel Duchamp and Jasper Johns. The reference to Duchamp's Trois Stoppages Étalon (Three Standard Stoppages), today in the Museum of Modern Art, New York, is quite obvious. Duchamp created and reworked his legendary installation in several phases between 1913/14 and 1953 (fig. 2).20 For the production of his Stoppages, Duchamp allegedly dropped three threads, each a meter long, on pieces of dark blue canvas. Then the threads were stuck to the surface of the canvas, according to the artist without any adjustments being made to the curves they fell into.21 Duchamp later cut up the blue cloth and stuck it to glass plates, presenting them as »paintings created by chance«. He also made three wooden slats, shaped along one side to match the curved paths taken by the threads; and he used these slats in the production of painted lines in pictures such as Resaux des stoppages and Tu m' . 22 In 1953, when Stoppages étalon was exhibited at the Museum of Modern Art in New York, Duchamp added two wooden meter sticks marked >1 METRE«.

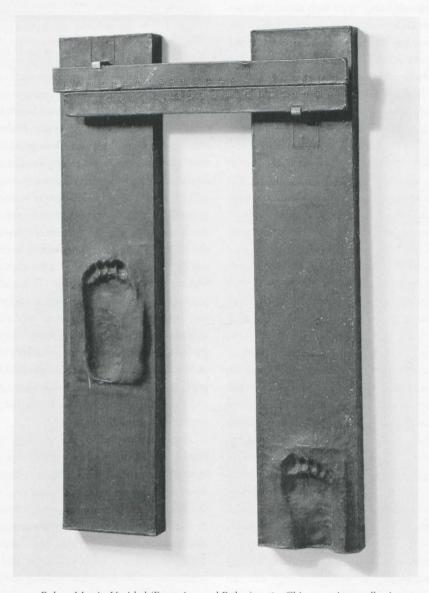
According to Herbert Molderings, one intention of Duchamp's artistic experiment was to reveal the arbitrariness of so-called objective standards in science.²³ In presenting three (out of an infinitely large number of) ways of defining the shape of one metre, he questioned his era's confidence in all kinds of objective authority and proposed individual measuring standards, thus defining a pictorial nominalism analogous to what Henri Poincaré regarded as the nominalism of science. The laconic attitude of Duchamp's installation must have been all the more provocative to his fellow-

Frenchmen, as France prided itself on being the inventor of the metric system – a convention that was introduced shortly after the French Revolution and based on a prototype (or oʻetalon) of the metre to which all other measuring devices were referred.²⁴

Footprints and Rulers

The most significant of Robert Morris's ruler pieces is Untitled (Footprints and Rulers) from 1964 (fig. 3), today in a private collection.²⁵ In this work, Morris combined two

horizontal cast-lead rulers of slightly differing sizes and scales with two vertical wood slats into which he inserted one footprint each, probably cast from his own feet. One of the two imprints is a fragment. The wooden slats are covered with lead, thus lending the whole object a unified, if somewhat drab appearance. Not only the rulers, but also the footprints can be referred to the model of Duchamp, as the French artist produced several body casts in plaster and metal, e.g. the Female Fig Leafc. ²⁶ The use of lead as a medium had precedents in Duchamp's oeuvre and writings, too. ²⁷ Untitled (Footprints and Rulers) c, however, exhibits



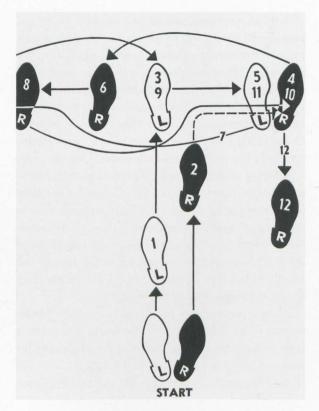
3 Robert Morris, Untitled (Footprints and Rulers), 1964. Chicago, private collection

a combination of elements not previously united in any individual work by Duchamp.

Although Morris asserts that his Untitled pieces were not about allusions,28 he nevertheless positioned the work in question (fig. 3) at the focal point of several discourses. Apart from Morris's Duchampian interest in schance producing measurement as an empty signs, 29 the most obvious reference is to the non-metrical measures of the Englishspeaking world, where the older system of anthropomorphic units of measure such as inches and feet has never been replaced by the metre, a unit based on a purely scientific convention. The two foot imprints in Untitled (Footprints and Rulers) do not, of course, represent the original model chosen for the unit of one foot, but are traces of an individual whose foot length is hardly identical with the official definition of that particular unit. The embedding of the footprints in lead lends the piece an additional element of disorderly subjectivity.

Untitled (Footprints and Rulers) was hung on a wall. Placing the footprints vertically made a strong contrast to the natural position in which one would have expected to see them, i.e. on the ground. Morris, whose master thesis on the bases of Brancusi's sculptures has already been mentioned, must have been quite sensitive in these matters. His shaking up of contemporary viewing conventions, in fact, is closely related to Andy Warhol's Dance Diagrams of 1962 (fig. 4) in which the painter created a similar paradox by making pictures of activities that take place on the floor to be hung on a wall – in at least one exhibition of the Dance Diagrams in the 1960s Warhol presented the pictures lying horizontally on the floor.30 The shoe and foot fetish exhibited by the young Warhol, who started his career as a designer of advertisements for the shoe industry, is well known.31 The artist may also have intended to make fun of Jackson Pollock's dramatic painting sessions that took place on canvasses positioned on the floor.32 The Dance Diagrams however, had a broader significance as well. According to Michael J. Golec, they demonstrate the significance of the diagram as a graphic representation that thematizes the dialectics of subjective experiences within a social-cultural context.(33 Seen in this light, Warhol's depictions of shoes, foot or shoe imprints visualise the regulative power that cultural rules or normative concepts exert over the individual.

Whereas Warhol's Dance Diagrams (tackled the issue of normative standards by citing an example from the larger field of popular culture, Untitled (Footprints and Rulers) reflected on a closely related problem from within the sphere of art and art history. Even though the footprints of Morris's

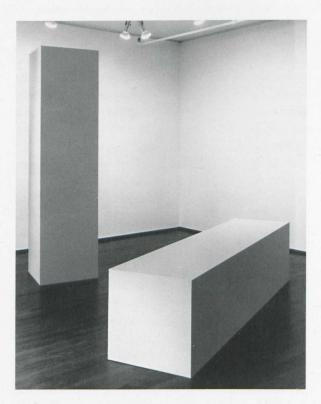


4 Andy Warhol, Dance Diagram, 1962. Frankfurt/Main, Museum Moderner Kunst

piece are set on two separate slats, the object resembles a sculpture's plinth - a plinth whose two halves are literally joined together by the two rulers. Judging from the rigidly geometrical construction into which the two footprints are set, they can be read as indexical traces of a free-standing archaic statue, either an Egyptian God or a Greek Kouros.34 This interpretation is also implied by the two rulers, because ancient Egyptian sculptors are credited with the invention of fixed modules or measures for the representation of human figures and animals35 - Morris himself has repeatedly underlined the influence of ancient Egyptian art on his early works.³⁶ Ancient Greek artists refined the modular system, using rods marked off with particular units for the measurement of individual human beings and, even more important, as standards for the definition of ideal proportions in sculptural images. These marked rods or yardsticks were called canons. The same word, Canons, was the title of a lost treatise by the Greek sculptor Polykleitos in which the system of ideal proportions of the human figure was explained and, finally, it was the name of a statue that was sculpted by the same artist and that is said to have exemplified his teachings on measure and proportion.³⁷

Most ancient Greek texts on mensurational canons and proportional standards in art are lost, but a number of quotations and references in Roman literature, e.g. in Vitruvius, are known. The Greek practice of defining >correct(size relations and ideal measures of the human figure can also be studied in archaeological monuments, among them the socalled Metronomical Reliefe in the Ashmolean Museum Oxford, a fragment of a representation of a man with outstretched arms and a head seen in profile. Over the man's right arm, a sole of a human foot is shown. According to archaeologists, the Oxford relief (and a number of similar pieces) served as an étalone to local sculptors who came to it with yardsticks or plummets to learn the standard proportions required for new figures they had been commissioned to carve.³⁸ Nineteenth century scholars were convinced that »the figure had been constructed in exact accordance with the canon handed down by Vitruvius«.39

There is no proof that Morris was aware of the Metronomical Reliefs, but several of his own works from the early 1960s confirm his growing interest in the relationship between art, geometrical principles and the human body. His Two Columnss (fig. 5) were originally made for a perform-



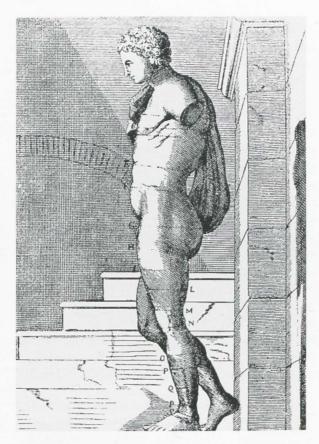
5 Robert Morris, Two Columns, 1973 refabrication of 1961 original. Teheran, Museum of Contemporary Art

ance during which Morris planned to position himself inside the hollow standing cube and then to topple it over. 40 The two plywood cubes he called »columns« lack capitals and bases. Strictly speaking, they are mere cubes or pillars rather than real columns. Yet, the choice of this title cannot be put down to mere inaccuracy. By making the »sculptures both literally and metaphorically a surrogate for the human body, Morris adopted an anthropomorphic approach that was rooted in antiquity and enjoyed a revival in Renaissance architecture — the man-shaped columns of Francesco di Giorgio are just one example. 41 Using a similar parallelisation, Morris integrated his body into the standing »columna and tried to efface the dichotomy between the work of art and its producer: now the artist was »inside« his work. 42

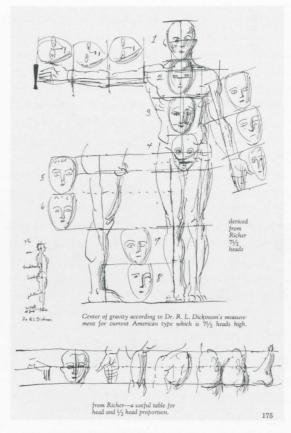
Foot and Head Modules

Modules and body canons were favourite subjects of art theory and art education from the Italian Renaissance until the early twentieth century. They served to construct human figures on a rational basis and provided a theory of visual creation ultimately intended to put the visual arts on the same level as the established academic disciplines, the artes liberals or litterae. 43 A passage in Vitruvius inspired Leon Battista Alberti to employ foot-lengths as a module and to invent the Exempedae system. Thus, he declared the foot his elementary unit for the artistic construction of ideal proportions. Alberti's foot-lengths module was highly influential.44 The left foot of Leonardo's Vitruvian Man (ca. 1490) is not by chance positioned in a parallel line to the picture plane, directly over a measuring scale: here, the artist represented a module that served to demonstrate the regular or geometric construction of the ideal human form.⁴⁵

The seventeenth century, in the wake of Nicolas Poussin's measuring campaigns of ancient sculpture in Rome, saw a shift of artistic interest in figure modules from foot-lengths to face- or head-lengths. Poussin's list of elementary proportions exhibited by the so-called Antinoos in the Vatican collections (as published in Giovanni Pietro Bellori's ›Vite‹ of 1672) is almost exclusively based on the standard measure of the ›faccia‹, with only a small section at the end devoted to the foot (fig. 6). 46 In the accompanying image in the ›Vite‹, however, the six subdivisions in the pillar on the right echo Alberti's ›Exempeda‹, and the stairs behind the figure not only mark certain measuring points of the statue's lower body (thus turning the stairs, ›scala‹, into a scale), they also indicate the activity of ›moving upwards‹ or ›climbing·, which is primarily a task for the feet. However, the head of



6 Unknown engraver, Measures of the Vatican Antinoos as taken by Nicolas Poussin. In: Giovanni Pietro Bellori, Le vite de' pittori scultori et architetti moderni, Rome 1672

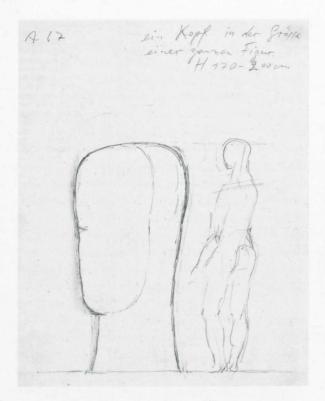


7 Proportional diagram of the human figure. In: Reginald Marsh, Anatomy for Artists, New York 1945

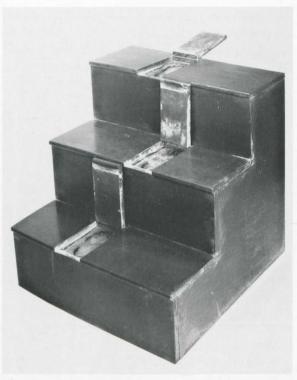
Antinoos remains the focus of the spatial system and the distribution of light in this image, and Poussin took pains to single out this part of the body, rather than the feet, as the centre of his artistic interest.⁴⁷

From the late seventeenth century onward, the face or head (rather than the foot) prevailed as an elementary module for the construction of the human figure according to the rules of art. This reveals the idealistic direction taken by classicist art theory under the direction of Poussin and the French Académie Royale. The head-module attributed to Polykleitos (the human body is usually 7½ head-lengths talls) turned out to be a central element of the figure canons preached by all art academies until the beginning of the twentieth century and prior to the rise of modern art. As Such fixed proportions or principles of the human figure served as surrogates for what had previously been defined in the individual measuring activities undertaken by painters or draftsmen. Even during the years of post-World War I modernism, the curricula of many art schools stuck to these

academic paradigms: Oskar Schlemmer's Menschenlehred course at the Bauhaus on the physical and spiritual aspects of human nature is a case in point. In his preparatory notes, Schlemmer introduced both the Lance Bearer of Polykleitos and a 7 1/2 head module of the human length. 49 Similar principles were taught in textbooks for American art students of the 1940s and 50s such as the Anatomy for Artists by Reginald Marsh.50 The sketchy diagrams of Marsh, who is also known as the first art teacher of Roy Lichtenstein, point to his activities as a designer of cartoons, but at the core of his Anatomy is a conservative combination of proportional figures derived from a classical 7 1/2 head length module (fig. 7). Artists with an academic background, both in the U.S. and in Europe, continued to reflect on these principles of figure construction, e.g. Joannis Avramidis, who in 1967 reversed the traditional construction of human figures out of head lengths by drawing a head in the length of an entire figure (fig. 8).51



8 Joannis Avramidis, Study for a Head in the Size of a Figure, 1967. Munich, Staatliche Graphische Sammlung



9 Robert Morris, Untitled (Stairs), 1975 refabrication of 1964 original. Chicago, The Art Institute of Chicago

Returning to Robert Morris, it becomes apparent that the artist was more interested in feet, foot imprints and similar artistic >groundwork(than in faces or head-lengths.52 Apart from Untitled (Footprints and Rulers), his piece Untitled (Stairs) of 1964, today in the Art Institute of Chicago, can testify to this personal preference (fig. 9).53 In each step, a part of the lead-covered wood can be opened to reveal cast-lead footprints of the artist. The positions of these imprints echo or imitate the steps of a person going up the stair. Steps and stairs, traditional artistic symbols of systematic movement and methodical progress, are here confronted with the indexical traces of a human individual. Directly underneath the sun-impressed stairs or steps, an individual human being has left an imprint that would normally have remained invisible. It is up to the user (rather than the beholder) of this piece to discover the imprints by opening up the small compartments under each step. Apart from the unavoidable reference to Duchamp, Untitled (Stairs) also reflects Morris's knowledge of works by his colleague Jasper Johns, notably the Memory Piece (Frank O'Hara). In this object, Johns attached a rubber cast of the poet O'Hara's left foot to the underside of the lid of a wooden box. The box

has three drawers filled with sand. When the lid is pressed down and lifted, it leaves a footprint in the sand.⁵⁴ The shape of O'Hara's foot is reproduced mechanically, and the process – quite literally a memorable impression – can be repeated and infinitums.

A short while before Morris, Jasper Johns started to integrate rulers into several of his pictures. Passage (fig. 10) of 1961 is a combination of themes and materials from Marcel Duchamp with painterly gestures in the tradition of Abstract Expressionism. Even the title appears to be inspired by Duchamp's painting Passage from Virgin to Bride. 55 The ruler in Jasper Johns's picture is marked RULER and positioned on a nail in the upper left – not far from the imprint of an iron named >IRON <. It is not just the semantic >value < of both objects, but also the production process of the painting that is thus playfully announced or kept visible. In addition to that, Johns has made it clear that the ruler helped to destroye the balance between RED, YELLOW and BLUE by leaving its marks in the picture's wet paint. Combined with the reference to Duchamp, the erotic connotations of these elements are quite obvious. The grey field of colour on the top left was produced by wiping movements of the ruler

on the nail and attached to a cord. This is particularly significant, as this section of the painting resulted from mechanical production and was thus quite remote from the painterly pathos of New York School pictures produced in the 1950s.

Rulers as an artistic medium had obvious attractions for Johns. On account of their provocatively unpainterly or unartistic appearance, they »became a purely contextual machine or device for making the painterly mark«56 and thus lent his pictures a Duchampian spirit. In addition to that, the rulers quantified Johns' canvas as »a literal object possessed of measurable (but not metaphorical) dimension - in other words, of actual size«.57 It would be mistaken, however, to assume that such indications of actual size were just some kind of anti-illusionism in the tradition of the French Cubists. Even though Johns deftly avoided positioning himself unambiguously in these matters, issues of measure, scale, regularity and order were more en vogue in the arts and art theory of the 1950s and 60s than one would assume today. Ever since the publication of Matila Ghyka's The Geometry of Art and Life in 1946, parts of the Amer-

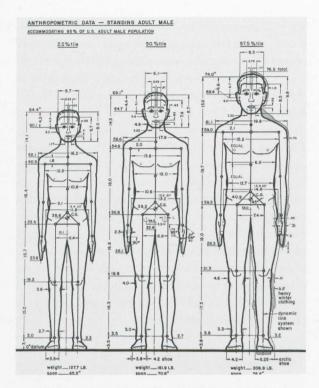


10 Jasper Johns, Passage, 1962. Cologne, Museum Ludwig

ican art scene searched for natural (rather than conventional or academic) principles applicable to the creation of works of art, a quest that, in the 1960s, embraced artists and art critics, philosophers and psychologists alike. Books such as Module Proportion Symmetry Rhythma edited by Gyorgy Kepes (1966),58 Anton Ehrenzweig's The Hidden Order of Arts (1967)⁵⁹ or Richard Arnheim's Entropy and Art: An Essay on Disorder and Order (1971)60 document the immense contemporary interest in the theoretical grounding of concepts of regularity, formal organisation and the natural pevolutions of works of art. It is not by chance that most of these books were published in the heyday of Minimalism. In contrast to these attempts at the foundation of a new natural order of artistic creation, few American modernist painters and sculptors remained devoted to the human figure as an artistic task sui iurisc. 61 Much of this indifference was related to an attitude shaped in the early phase of the avant-garde movement.

The Measure of Man

At the beginning of modern art in the early twentieth century, the majority of painters were critical of geometrical or mathematical principles, notably in representations of human beings, regarding them as outdated limitations on artistic freedom. 62 This view was shared by some protagonists of contemporary art history. Speaking for the art of his time, Erwin Panofsky in his History of the Theory of Human Proportions as a Reflection of the History of Stylese (1921) pointed out that the analysis of objective measures and human proportions only remained of interest to physical anthropologists and criminologists - with the exception of a few old-fashioned eccentrics (Schwärmer) among artists. 63 Panofsky was right insofar as the visual arts had long since lost their monopoly over representations of the vaverage human body. Not only had medical research developed its own measuring standards and visual conventions, but a whole new scientific discipline, Anthropometry, devoted itself to the systematic measuring of human beings.⁶⁴ The uses of anthropometry were manifold. When the growing fashion industry demanded reliable information on human growth, Lambert Quételet, the founding father of statistics, defined a precise measuring system for the evaluation of body sizes and the homme movens. 65 Another function of anthropometry was associated with criminology, notably since Alphonse Bertillon, whose Instructions signaletiques adapted the principles of scientific photography for use in police records.66 Cesare Lombroso's measuring of what he



11 Henry Dreyfuss, Anthropometrical diagrams. In: Henry Dreyfuss, The Measure of Man. Human Factors in Design, New York 1960

called 'criminal expressions' represented the darker side of anthropometry, insofar as the author claimed that criminal characters could be identified from their distinctive bodily features even before they had committed a crime. ⁶⁷ Whatever these new disciplines asserted: their claims to objectivity were directly related to the prevailing prestige enjoyed by 'data' obtained by metrological means. Marcel Duchamp's 'Stoppages' appear already to have reflected the artist's acute awareness of the fact that, in his era, rulers stood as much for traditional artistic definitions of 'ideal' figures as for the pretensions to 'objectivity' of a great many newly established scientific disciplines.

Panofsky, in publishing his article on proportion in 1921, was unaware that some of the most renowned artists of his time were just then in the process of returning to the myth of fixed rules in art. One of them, Gino Severini, proclaimed the necessity of universal geometrical principles rooted in the positive or matural traditions of art such as the Golden Section. Not surprisingly, rulers and goniometers featured prominently in Severini's paintings (as they did in the works of Italian anti-avant-garde artists of the 1920s and 1930s such as Mario Sironi). Among a considerable number of artists

advocating the use of the Golden Section was Etienne Béothy, whose book La série d'or appeared in Paris in 1939. Béothy presented geometrical proportions as a universal principle of art, especially of sculpture, but he also postulated them as a tool for the design of glasses, knifes and automobiles. However, other artists active in Europe in the 1920s and 30s, notably DADA and the Surrealists, rejected all notions of canonical measures in art and treated them with caustic irony.⁷⁰

In the post-World War II visual cultures of Europe and America, figure canons and proportional concepts were put back onto the agenda - although (characteristically) avantgarde painting largely steered clear of this trend.71 With regard to architecture, it is enough to mention Le Corbusier's Modulor of 1950 in which the universal applicability of the Golden Section and proportional systems was proclaimed.72 In 1960, Henry Dreyfuss published his famous design manual The Measure of Mans, a book which was based on extensive measuring campaigns and whose proportional diagr ams were designed to provide anthropometrical data on the average American for industry (fig. 11).73 In the visual arts, however, the definition or application of fixed rules for the human figure was confined almost exclusively to the sphere of art education. For example, Alexander Dobkin's influential book Principles of Figure Drawing (1948) presented to its readers a selection of proportional diagrams inspired by Alberti and Dürer and explained the uses of figure modules. Even so, Dobkins concluded his instructions with a warning: Do not measure off proportions with a ruler. The essence of good drawing is freedom and spontaneity. Avoid becoming a slave to rules(74 - an appropriate message for a book published in the New York of Jackson Pollock and Mark Rothko, where the human figure as an artistic task had almost died out.75 Characteristically, the Figures produced by Jasper Johns in 1955 were canvasses painted with large numbers from Zero to Nine. In a recent article, Robert Morris has called these works punning metaphors for the human figure.76

In performing his Anthropométries in 1960/61 (fig. 12), Yves Klein virtually reintroduced the discourse of the human figure to western avant-garde painting. He created his works during public assessions as imprints on canvas of nude women (and a few men) who had previously covered themselves with colour. It is known that the title Anthropométrie was coined by the art historian and critic Pierre Restany, Klein's preferred interpreter. Restany, on first seeing the imprint paintings, allegedly exclaimed these are the anthropométries of the Blue Period, and explicitly connect-

ed them with the measuring practices of Albrecht Dürer.⁷⁸ What exactly motivated Restany's choice of this term is unclear. He may have introduced the title (which Klein readily accepted) with respect to Dürer's representations of body types, rather than of individuals. And indeed, Klein's Anthropometries rarely contain imprints of a model's face or hands, since almost every picture is reduced to traces of the torso. Klein thus made visible the conflict between the physical body (whose imprint produces an indexical sign) and the conventions followed by representational painting since the Quattrocento, when the figure featured prominently. However, in spite of his picture's title, Klein neither measured human beings nor represented body types in the tradition of Dürer - and he never, of course, tried to define or prescribe ideal proportions. By publicly celebrating his painting sessions with living brushes, he opened the Anthropométries up to a range of associations, including scientific objectivity, the Pollockian performative,79 metrological practices of Renaissance art, the Holy Shroud, and Veronica's Veil. Klein thus positioned his works in a wide conceptual space between physical reality, art history and transcendence. By converting imprints of the body into large-scale >abstract< images in which individual human traces were both preserved and transformed, he opted for a romantic approach (Robert Morris) to the figure/body problem which the American art scene of the early 1960s found hard to understand or even to take seriously.80

The Nature of Sculpture

Thus, whatever superficial similarities may seem to exist between the employment of body imprints and references to measuring standards in the works of Klein and Morris, in actual practice the two artists had little in common. >Untitled (Footprints and Rulers) by Morris, as a matter of fact, reflects several discourses that were quite unrelated to Klein's work but that shaped the theoretical positions of an artist who would soon stand out as a protagonist of the American art scene of the mid-Sixties. Admittedly, the handcrafted appearance and the body imprints of Morris's object in question were far from what is generally associated with high-Minimalism, e.g. the polished sets of plywood and metal boxes by Donald Judd, the rectangular Floor Pieces by Carl Andre or even Morris's own cubic structures from ca. 1964 onwards. By then, however, Morris had himself gone through a personal artistic development that included (in the words of James Meyer)81 the free-wheeling examination of Duchamp's legacy, seen through the lenses of Johns

and Cages, a process that resulted in an open-mindedness, a willingness to experiment, quite unlike Judd's rigorous formalism.

As has already been pointed out, Untitled (Footprints and Rulers) was not conceived as a free-standing sculpture but as a relief-like object hung on a wall. 2 It therefore came close to an art form that Morris himself would soon criticise for not conforming to the principles of sculpture. In the first of his four 'Notes on Sculpture (February 1966), he claimed that the relief cannot be today accepted as legitimate. The autonomous and literal nature of sculpture demands that it have its own, equally literal space — not a surface shared with painting. Furthermore, an object hung on the wall does not confront gravity; it timidly resists it. The ground plane, not the wall, is the necessary support for the maximum awareness of the object. 3 Morris, in an obvious attempt to disparage the coloured wall objects of his colleague and competitor Judd, thus defined the 'nature' of sculpture and argued:



12 Yves Klein, Anthropométrie, 1961. Cologne, Museum Ludwig

The qualities of scale, proportion, shape, mass are physical. [...] Color does not have this characteristic. It is additive. (84 In stressing the physicality of sculpture, Morris argued against some of his own works that he had created less than two years previously. Only in terms of colour (or, rather, the absence of colour), Untitled (Footprints and Rulers) still appeared acceptable to his criteria for true sculpture. It has long since been noted that categorisations of the type just cited were influenced by (and probably parodied)85 the writings of Clement Greenberg on the integrity of the artistic medium. Even the most outspoken critic of Minimalism, Michael Fried, pointed out in retrospect:86 »What fascinated me about the Minimalists was that they read Greenberg, valued the same recent art, but saw in it a development that projected literalness. [...] It was as if they were the ones who really believed the Greenbergian reduction - that there was a timeless essence to art that was progressively revealed. And

13 Bruce Nauman, My Last Name Exaggerated 14 Times Vertically, 1966. Private collection

in their reading the timeless essence turned out to be not just the delimited flat surface of painting but the literal properties of the support.«

In actual practice, Morris's concern with strict definitions of the properties of certain artistic media or visual modes was only a phase. He opposed essentialism. The major part of his activities in the 1960s consisted in tearing down a priori definitions of genres and the boundaries between existing art forms, such as those existing between the plastic arts and the theatre: he thus tried to put an end to the isolated, static and stable existence of the art object and to open artistic production to questions of perception and the temporal aspects of form. This research was precisely what Fried, opposing the introduction of theatricality into art, called the literalness of Morris. By stressing the performative and perceptual aspects of his work, the artist became also more openly political.

While Dutitled (Footprints and Rulers) shares Duchamp's ironic attitude toward the belief in the objective value of scientific rules, it also characterises Morris's interest in categories felt at the time to describe essential qualities of art such as measure, scale and proportion—an interest for which Jasper Johns had set the precedent and which was also shared by colleagues as Carl Andre. However, Morris's ditteralness induced him to go one step further and to regard (or question) measuring devices as the clearest expressions of the rules of art, in short: of the canonical. In making visible these aspects in his ruler pieces, he evoked the tradition of the figure and, consciously or not, returned to the most literal sense of Canona Ruler or Yardstick.

Morris has insisted more than once that he is neither an idealist nor a formalist.91 As a self-declared system-seeker, much of his work in the 1960s consisted in testing formal definitions or conventional meanings and integrating the process of testing into his art. Among Morris's colleagues, the one who best understood this approach was Bruce Nauman. In fact, some of Nauman's film and video performances such as Dance or Exercise on the Perimeter of a Square (1966/67) and Slow Angle Walk (Beckett Walk) (1968) resemble enacted versions of Morris's confrontations of measuring devices or geometrical principles with indexical traces of the human body such as Dntitled (Footprints and Rulers) (fig. 3).92 Nauman even went so far as to base one of his best-known early works on a reinterpretation of an established academic standard of representation: the figure modules of Polykleitos. He explained the genesis of his neon installation My Last Name Exaggerated 14 Times Vertically (1967) by pointing out that the work resulted

from his testing out the 7 [sic] head-lengths module of Polykleitos on his signature (fig. 13). Having stretched his name Nauman seven times vertically, "it didn't look right, so I stretched it some more and it looked just a little bit exaggerated. Finally I doubled the classical proportion and I got something that looked abstract enough.«93 Nauman thus brought two visual practices long considered to be emblematic of art into collision: figure modules and signatures. As the work resulting from this operation demonstrates, headlengths as a means of image construction were pointless without the concept of the human figure. The application of rules of proportion to the artist's signature did not generate true art 94 or classical imagery, but resulted instead in grotesquely exaggerated lines not unlike the threads in Duchamp's Stoppages (.95 In Nauman's neon installation, the age-old academic concept or sétalons of the human figure evaporated into a mon-figurative piece of art, leaving behind just a few nostalgic luminous traces on the wall. The artistic lacuna indicated by My Last Name [...] clamoured to be filled with new content.

From Figure to Body

In the later 1960s, Morris's aversion to all kinds of permanent form, style, structure or essence of art led him to carry out his anti-form experiments such as the free-falling Felt Piecesc. 96 At this time, he regarded the conventions of the clear and articulate object as repressive. His political conviction that a material and intellectual reconstruction of society should be rooted in a revolutionary aesthetics unimpressed by traditional forms took him onto the streets and, in 1970, to the entrance of the Metropolitan Museum of Art. The press photo of the artist during his Art Strike demonstrates both the intensity and the limitations of his battle against canons and the Canonical, as he now invoked the solidarity of a canonical institution for his revolutionary purposes. Characteristically, even though Morris may, in his most openly political actions, have placed himself outside the museum, he remained within the framework of art and its institutions.97

Not surprisingly, rulers, scales, measuring devices, feet and foot imprints were motifs or working materials favoured by several other artists active in the late 1960s and early 1970s. Some of these ruler pieces continued in the tradition of Duchamp's Ready-mades, e.g. >Un mètre pliable by Marcel Broodthaers (1974), a folding ruler, four of whose ten segments are painted green, red or black. »In a sense, the calibrated measurement numbers are elements of culture —

of the human tendency to measure, categorize, label - and the colored areas represent nature, a visual, nonlinguistic, nonnumerical presence. On the other hand, the measurement may be seen as representing nature, the reality of space, and/or matter's extension in space and the colored areas may represent art, the cultural aestheticization of reality.«98 Mel Bochner's two Actual Size« photos (1969) confronted life size images of the artist's arm and face next to a scale fixed on the wall, thus translating the discourse of Morris's ruler pieces into the indexical medium of photography.⁹⁹ In projects elaborating on this approach, Bochner postulated the existence of a self-sufficient geometrical system that could dispense with viewers or users. The best known work is his Measurement: Room (Galerie Heiner Friedrich, Munich, 1969), an empty room whose architectural features were marked on the wall with lines of tape bisected by the notation of its exact measurements. 100 »The room had been measured, but this was not for the sake of the viewers.«101 Instead, the artist tried to project »a mental construct of the space onto the space itself«. 102

Most other measuring pieces produced by American or European artists in these years manifested a more direct »opening up of sculpture to the world around it, and to the body within and without«. 103 It was not by chance that a lot of artists turned to media other than painting or sculpture (in the traditional sense of the word), such as photo collages, video performances and installations of industrially produced materials. Bodies, including that of the artist, often served as their prime or sole subject. This choice of new means of expression serving new artistic purposes would hardly have been possible without the previous reflexion of canonical rules of representation such as the figure. Under these conditions, an art declaring itself ounrepressed by professional rules thematised body canons, measuring concepts and normative conventions in society. Characteristically, some of the most important works related to measuring practices and the body in the 1970s were produced by female artists. Martha Rosler's Vital Statistics of a Citizen, Simply Obtained of 1977 is a videotape in which the artist's nude body is relentlessly measured by an examiner and his passistants. In staging and recording this uncanny scenario, Rosler represented and characterised medical and anthropometrical measuring practices as expressions of male power. 104

Valie Export's Ontologischer Sprung I, II, IIIc of 1974 (fig. 14) is a montage of three rectangular photographs showing women's feet in different surroundings and on different levels of representation. The image at the bottom is a black and white photograph of a woman's bare feet standing on







14 Valie Export, Ontologischer Sprung I, II, III, 1974.
Private collection

a beach, the second is a colour photograph of another woman's feet with painted nails standing on the black and white photo (the feet do not cover those of the other woman), while the third image on top consists of a photo of the second photograph lying on an ornamental carpet with a third pair of female feet standing directly on the image of the first woman's feet. ¹⁰⁵ No rulers or yardsticks have been added. In these images, Valie Export expressed her concept of a feminist art that identifies or represents hierarchies of representation and instructs her viewers to understand the social dimensions of these hierarchies, thus turning visual competence into political energy. Export's combination of

morphologically related images acquired ontological quality and raised serious questions about normative concepts in society. The artist was emphatic that even in their fragmented appearance as photographed images, each pair of feet represented an individual female. Whereas Morris had confronted or paralleled foot imprints and rulers, the photos in Export's Ontologischer Sprunge defy attempts to judge, categorise or objectify the body and its parts by canonical measurese of any kind.

In 1997, Robert Morris published an essay entitled Professional Rules. 106 Looking back on his work since the early 1960s, he asked himself the question: »How do you account for not following the rules of a consistent art practice?«107 Among other aspects, Morris explained the apparent lack of a unified style or family resemblance among his works as the result of his interest in exploring the limits of art's conventions. Discussing his previous activities in this light, he quoted the sentence: »When I obey a rule, I do not choose. I obey the rule blindly« from Ludwig Wittgenstein's ›Philosophical Investigations, thus implying that he, Morris, could hardly have questioned the rules of art of his era, had those rules not been under attack from many sides. 108 According to Morris, in the early 1960s »the modernist rules of the pure genres were already a disrupted set of customs«, i.e. the artistic conventions of modernism were beginning to lose their validity. 109 New rules of new genres and subgenres began to replace the old, seemingly general or essential rules of what Morris, in analogy to Wittgenstein's language games, called the part-making games. Ironically, Greenbergian modernism appears to have been among the last defenders of the conceptual unity of art - perhaps along with art history, a discipline which, according to Morris, is characterised by an »obsession with linking the same in a series«, and which ignores the fact that it is faced with »aspects of games whose changes over time make them only distant relatives to those played in the past«."0

Despite such scepticism vis-à-vis what he considered to be methodology of art history, Morris criticised the current (1997) »discourse that [...] sees the meanings of all expressions as the mere symptoms of the various political, economic, and social ideologies within which the art of any given time is suspended«.¹¹¹ He did so with a clear awareness of how the art world had developed since the 1970s, in which »a new landscape of niches« had grown up, »each of which came to house a minigenre. Today, these dot the landscape as far as the eye can see. Genre niches of body art, video art, and gender art of every variety.«¹¹² According to Morris, the fictitious unity of art based on certain

conventions in pre-1960s modernism had dissolved into a system of »deeply dug niches proclaiming victimhood as inspiration«.

Contemporary art, needless to say, is far from being as fragmented or disrupted as Morris provokingly claimed it to be in Professional Rules, not least because the artistic sphere is not, in fact, just an area of fixed conventions, but (as Pierre Bourdieu has pointed out) one of shared institutions, too, including galleries, museums, art journals and shared economic interests. Despite this, however, there can be no denying that the loss of art's former pretensions to be in possession of permanent truths has diminished its status and influence in certain parts of society. And some nostalgia for the old days, mixed with obvious irony, can be detected in recent works such as Neo Rauch's painting

Regel« (Rule), in which artistic tools and measuring devices are confronted with various symbols of regularity or porders in general culture. He Obviously, though that there can be no turning back to the era of pures principles or permanents artistic rules. Moreover, as the figures—in the sense of a beauty standard propagated by the mass media, the cosmetics and fashion industries—appears to be more alive than ever before, the art sphere, having adopted the bodys, remains a privileged space for its critique. However, just as the physical reality of works of art transcends their possible status as "symptoms of the various political, economic, and social ideologies" (Morris), the normative artistic concepts that shaped these works remain a part of their presence. Artists are well advised to remember the historical circumstances that have shaped the privileged practice called art.

With reference to works by the American minimalist Robert Morris involving rulers and/or imprints of the human body, this essay examines how artists in the 1960s were preoccupied with defining the »essence« of art as a system of binding rules, mainly including the postulate of the existence of canonic standards and harmonious proportions, in the sense of basic artistic laws. Ordering concepts such as these, adopted from Antiquity and from which art derived its aspiration to methodological autonomy, had been further developed since the Renaissance in anthropometric studies, resulting in art academies laying down measurements relating to standards, modules and human proportions, the essence of which was the figure (as opposed to body, etc.). Some Classical modernists rejected such principles as normative, while others continued them. In the period between the world wars, fixed dimensional ratios and proportions were postulated as principles that permeated nature and art. In non-figurative art in the 1950s and 60s, concepts of measurement were not (or not exclusively) restricted to the human figure, but the latter continued to be seen largely uncritically as the standard for the average man in theories of drawing and art, in fashion design and in industrial anthropology.

This essay interprets Morris's ruler installations, with their double-meaning titles (ruler as measuring tool and leader), both with a view to Marcel Duchamp's critique of objective standards in art and science, and by a comparison with works by contemporaries like Jasper Johns, Yves Klein and Andy Warhol, which integrate measuring instruments, allude to measuring practices or depict art practices based on rules. The questioning of essentialist standard and module systems in for example Bruce Nauman and Martha Rosler is identified as an art strategy initiated by Morris in the 1960s and 70s in order to criticise apparently immutable hierarchies in culture and society – up to and including the refusal to see the imprint of the individual body as an expression of any canonic measurement or standard (Valie Export).

In summary: this essay opts to understand the works discussed as the expression of the paradigm change from the concept of the (apparently objective and naturals) figures to that of the bodys (represented in social, political and gender debates).

Ausgehend von Werken des amerikanischen Minimalisten Robert Morris, die aus Linealen und/oder menschlichen Körperabdrucken gebildet sind, untersucht der Beitrag die Beschäftigung von Künstlern der 1960er-Jahre mit Definitionen des Wesense von Kunst als System verbindlicher Regeln, darunter vor allem das Postulat der Existenz kanonischer Maße sowie harmonischer Proportionen im Sinne von künstlerischen Grundgesetzen«. Solche aus der Antike überkommenen Ordnungskonzepte, von denen die Kunst Anspruch auf methodische Autonomie ableitete, wurden seit der Renaissance mit anthropometrischen Studien fortentwickelt und führten an den Kunstakademien zur Festlegung von ›Standard-‹, ›Modul-‹ und Verhältnismaßen des Menschen, als deren Inbegriff die Figur (im Gegensatz zu Körper, Leibe et cetera) anzusehen ist. Teile der Klassischen Moderne lehnten solche Prinzipien als normativ ab, andere schrieben sie fort. In der Zwischenkriegszeit wurden feste Maßverhältnisse und Proportionen als Natur und Kunst durchwaltende Prinzipien postuliert. In der Jungegenständlichen Kunst der 1950er- und 1960er-Jahre waren Maßvorstellungen nicht (oder nicht mehr ausschließlich) auf die menschliche Figur beschränkt, doch lebte diese in Zeichen- und Kunstlehren, Modedesign und Industrieanthropologie als Standard des mittleren Menschen weitgehend unkritisch betrachtet fort.

Der Beitrag interpretiert Morris' Lineal-Installationen mit ihrem im Titel enthaltenen Doppelsinn ()Ruler«: Lineal/ Herrscher) einerseits in Hinsicht auf Marcel Duchamps Kritik an »objektiven Maßen« in Kunst und Naturwissenschaften, andererseits im Vergleich mit Arbeiten von Zeitgenossen wie Jasper Johns, Yves Klein und Andy Warhol, in die Messinstrumente integriert sind, die auf Messpraktiken anspielen oder die auf Regeln basierte Kunstpraktiken abbilden. Die Befragung essentialistischer Maß- und Modulsysteme etwa von Bruce Nauman und Martha Rosler wird als von Morris initiierte künstlerische Strategie der 1960erund 1970er-Jahre zur Kritik scheinbar unumstößlicher Hierarchien in Kultur und Gesellschaft identifiziert - bis hin zur Weigerung, den individuellen Körperabdruck als Ausdruck eines kanonischen Maßes oder Standards zu begreifen (Valie Export). Zusammenfassend wird dafür votiert, die diskutierten Werke als Ausdruck des Paradigmenwechsels vom Konzept der (scheinbar objektiven und ›natürlichen‹) ›Figur‹ hin zu demjenigen des (in sozialen, politischen und Gender-Diskursen repräsentierten) ›Körpers‹ zu verstehen.

This text developed from research conducted for my book on normative concepts and the human figure in nineteenth and twentieth century art and visual culture and includes materials from papers presented at The Art Historical Canona conference at the Warburg Haus in Hamburg, 5–7 October 2006, and a guest lecture at The Western Michigan University, Kalamazoo, on 24 September 2007. I wish to thank Manfred Hinz, Hubert Locher, Griselda Pollock, Charlotte Schoell-Glass, and Gosbert Schuessler for their critical comments and suggestions and Neil Jackson for polishing my English.

- 1 See, for example, Abraham Bosse, Représentation des différentes figures humaines avec les mesures prises sur les antiques qui sont de présent à Rome, Paris 1656; John Marshall, A Rule of Proportion for the Human Figure, ill. by John S. Cuthbert, Glasgow 1879; Eadweard Muybridge, The Human Figure in Motion, London 1901; Paul Richer, Introduction a l'étude de la figure humaine, Paris 1902; F. F. and P. D., La figure humaine dans l'art et l'enseignement, Brussels 1918; Richard Rothe, Die menschliche Figur im Zeichenunterricht, Vienna 1925; Alon Bement, Figure Construction. A Brief Treatise on Drawing the Human Figure for Art Students, Costume Designers, and Teachers, New York 1927. For an introduction to the history of figure drawing as reflected in textbooks and manuals for art students cf. Juan Bordes, Historia de las teorías de la figura humana, Madrid 2003; exh. cat. Une lecon d'anatomie. Figures du corps à l'École des Beaux-Arts (Paris, École nationale supérieure des Beaux-Arts), ed. by Philippe Comar, Paris 2008. For artistic anthropometry cf. Sigrid Braunfels, Georg Glowatzki, and Karl Herzog, Der »vermessene« Mensch. Anthropometrie in Kunst und Wissenschaft, Munich 1973; Sigrid Braunfels, Der vermessene Mensch, in: Antike-Rezeption in den Wissenschaften während der Renaissance, ed. by August Buck and Klaus Heitmann, Weinheim 1983, pp. 51-74. For artistic anatomy in general see Mathias Duval and Édouard Cuyer, Histoire de l'anatomie plastique. Les maitres les livres et les écorchées, Paris 1898; Boris Röhrl, History and Bibliography of Artistic Anatomy, Hildesheim 2000.
- 2 F. F./P. D. 1918 (as in note 1), p. 5: »Plus et mieux que les autres agents du décor architectural ou du métier, la figure humaine est apte à bon service pour l'expression de l'idée abstraite par la forme concrète.« Such notions of the figure in art as a material expression of an inner exemplare or ideal stood in the tradition of Albrecht Dürer's famous sentence »Denn ein guter Maler ist inwendig voller Figur«, cf. Erwin Panofsky, Idea. Ein Beitrag zur Begriffsgeschichte der älteren Kunsttheorie, Leipzig 1924, p. 70.
- See, e.g., Jürgen Fredel, Ideale Maße und Proportionen. Der konstruierte Körper, in: Die Beredsamkeit des Leibes, ed. by Ilsebill Barta Fliedl and Christoph Geissmar, Salzburg 1992, pp. 11–42. According to Bätschmann, the definition of rules as the very essence of art originated in French 17th classicism, cf. Oskar Bätschmann, Fréart de Chambray et les règles de l'art, in: La naissance de la théorie de l'art en France 1640–1720, ed. by Stefan Germer and Christian Michel, Paris 1997, pp. 61–69.

- 4 See, for example, Nicholas Mirzoeff, Bodyscape. Art, Modernity and the Ideal Figure, London/New York 1995. Mirzoeff's understanding of the term figure in art appears to be limited to the concept of sicons of the perfect body as exemplified by Leonardo's Vitruvian Manc. He does not cite other examples from art history nor does he explain the ways in which artists in actual practice employed the Leonardo to create images. In contrast to what the title promises, there is no in-depth discussion of the relationship between the terms ofigure and obody in: exh. cat. Identità e alterità. Figure del corpo 1895/1995 (Venice, 46th Biennale di Venezia), ed. by Jean Clair, Venice 1995. No analysis of the semantic value of figure can be found in Pierce Rice, Man as Hero. The Human Figure in Western Art, New York 1987, or in exh. cat. The Figure in American Sculpture. A Question of Modernity (Los Angeles County Museum of Art), ed. by Ilene Susan Fort, Los Angeles 1995. For a recent attempt at a synopsis of the major forms of historic and current representations of the human body in art without recourse to concepts of the figure cf. James Elkins, Pictures of the Body. Pain and Metamorphosis, Stanford 1999.
- 5 The most comprehensive study of the history of the term ofigures in European literature, philosophy, and theology remains Erich Auerbach, Figura (1936), in: Gesammelte Aufsätze zur romanischen Philologie, Bern/Munich 1967, pp. 55–92. One should particularly take into account that investigations into the nature of the relationship between obodys and ofigures have a precedent in the theological controversies regarding the bodily presence of Christ in the Eucharist, cf. Auerbach, p. 81.
- 6 »Artists no longer refer to ›figure‹ drawing but to the ›body‹, which is conceived as a cultural construct, inscribed with social, sexual, and gendered meaning.« Exh. cat. The Quick and the Dead: Artists and Anatomy (London, The Royal College of Art), ed. by Deanna Peverbridge and Ludmilla Jordaniva, London 1997, p. 10.
- 7 See the review by Peter H. Feist of Judith Collins, Skulptur heute, Berlin 2008 (= German edition of: Sculpture today, London 2007), in: Journal für Kunstgeschichte 13, 2009, pp. 66–70, esp. p. 68. Recent textbooks relying on the concept of the figure include John Cody and Ron Tribell, Atlas of Foreshortening. The Human Figure in Deep Perspective, 2nd ed., New York 2002; Mario Henri Chakkour, Virtual Pose 3. The Ultimate Visual Reference Series for Drawing the Human Figure, Alexandria, VA 2004; Glenn Fabry, Muscles in Motion. Figure Drawing for the Comic Book Artist, New York 2005.
- 8 The conceptual shift from figure to body was anticipated in Georges Bataille's critique of the term figure as a synonym of anthropological or cultural continuity see his famous antiessentialist manifesto Figure humaine, in: Documents 1, 4, 1929, pp. 194–201, and Georges Didi-Huberman, La ressemblance informe ou le gai savoir visuel selon Georges Bataille, Paris 1995, esp. pp. 36–74.
- 9 Mirzoeff (as in note 4), p. 3. For a typical case study of the signified body published around 1990 cf. Lisa Jean Moore and Adele E. Clarke, Clitoral Conventions and Transgressions:

- Graphic Representations in Anatomy Texts, c. 1900–1991, in: Feminist Studies 21, 1991, pp. 255–301.
- It should be mentioned that there are other explanations of the claims of Renaissance artists to autonomy. For example, Richard Sennett, The Craftsman, New Haven/London 2008, pp. 65–74, connects such claims with the new (= post-medieval) concept of artistic genius and originality. Sennett's argument, however, does not take into account that the exaltation of artistic subjectivity in the Renaissance was complemented with the self-fashioning of artists as intellectuals and members of the academic sphere.
- II Cf. Maurice Berger, Labyrinths. Robert Morris, Minimalism, and the 1960s, New York 1989, pp. 1–4; exh. cat. Robert Morris. The Mind/Body Problem (New York, The Solomon R. Guggenheim Museum), New York 1994, pp. 160–161.
- 12 For the genesis of the labels >Minimal Art< and >Minimalism< cf. James Meyer, Minimalism. Art and Polemics in the Sixties, New Haven/London 2004.
- 13 Exh. cat. New York 1994 (as in note 11), pp. 134-141.
- 14 Exh. cat. New York 1994 (as in note 11), p. 135.
- 15 Berger 1989 (as in note 11), p. 33.
- 16 Exh. cat. New York 1994 (as in note 11), p. 136.
- 17 Exh. cat. New York 1994 (as in note 11), p. 137.
- 18 For a comprehensive introduction to the history and concepts of scientific objectivity cf. Lorraine Daston and Peter Galison, Objectivity, New York 2007.
- 19 The depiction of measuring devices in twentieth century art was far from being an unreflected ritual in praise of the lofty principles of Renaissance painting and sculpture. In Giorgio de Chirico's early metafisica paintings, for example, rulers, yardsticks and goniometers abound. De Chirico never explained the use of these elements in his pictures. His works have been interpreted as expressions of his fascination with current trends in higher mathematics and theoretical physics, such as the curved space of Bernhard Riemann and the ellipsoid as a way of representing non-Euclidean geometry; cf. Jole de Sanna, Matematiche metafisiche, in: Metafisica. Quaderni della Fondazione Giorgio e Isa de Chirico 1, 2004, pp. 23-110. However, the majority of these devices more likely displays and re-interprets the measuring traditions of pre-war art academies. All in all, De Chirico's rulers served to make the meaning of his pictures more enigmatic and unclear rather than to lend them any sense of (cultural or artistic) regularity.
- 20 Arturo Schwarz, The Complete Works of Marcel Duchamp. Catalogue Raisonné, rev. ed., New York 2000, pp. 594–596, cat. no. 282; Herbert Molderings, Kunst als Experiment. Marcel Duchamps 3 Kunststopf-Normalmaße, Munich/Berlin 2006.
- 21 »But do threads really fall into such lovely parabolic curves as displayed in Duchamp's 3 Stoppages Étalon, 1913/14? No matter how gravity behaves, or was assisted here, it is what is said about the intention that raises a large sign that reads CHANCE.« Robert Morris, Toward an Ophthalmology of the Aesthetic and an Orthopedics of Seeing (2004), in: Have I Reasons. Work and Writings, 1993–2007, ed. and with an introduction by Nena Tsouti-Schillinger, Durham/London 2008, pp. 186–201, here p. 191.
- 22 Molderings 2006 (as in note 20), pp. 56 and 99.

- 23 Molderings 2006 (as in note 20), pp. 102-119.
- 24 Cf. exh. cat. L'aventure du mètre (Paris, Musée national des techniques), Paris 1989.
- 25 Exh. cat. New York 1994 (as in note II), p. 164 (collection of Anne and William J. Hokin, Chicago). For a photo of the same piece from a slightly different angle see: exh. cat. L'art au corps. Le corps exposé de Man Ray à nos jours (Marseille, MAC), ed. by Véronique Legrand and Philippe Vergne, Marseilles 1996, p. 43. Cf. also Carter Ratcliff, Out of the Box. The Reinvention of Art, 1965–1975, New York 2000, p. 9.
- 26 Georges Didi Huberman, L'Empreinte, Paris 1999.
- 27 Cf. The Writings of Marcel Duchamp, ed. by Michel Sanouillet and Elmer Peterson, Oxford 1973, p. 76: "Lead embossed, hammered or "tufted" is less dense.
- 28 Robert Morris, David Sylvester. A Duologue, in: exh. cat. Robert Morris (London, Tate Gallery), London 1971, pp. 13–20, here p. 13. Cf. Tobias Vogt, Untitled. Zur Karriere unbetitelter Kunst in der jüngsten Moderne, Munich 2006, p. 239.
- 29 Exh. cat. New York 1994 (as in note 11), p. 134.
- 90 On Warhol's Dance Diagrams of, Yve-Alain Bois and Rosalind F. Krauss, Formless. A User's Guide, New York 1997, p. 99; Benjamin Buchloh, Andy Warhol's One-Dimensional Art, 1956–1966, in: idem, Neo-Avantgarde and Culture Industry. Essays on European and American Art from 1955 to 1975, Cambridge, MA/London 2000, pp. 461–529, esp. pp. 485–488; Sandra Umathum and Stefanie Rentsch, Vom Gehorchen. Über das Verhältnis von Handlungsanweisungen und ästhetischer Erfahrung, in: Ästhetische Erfahrung: Gegenstände, Konzepte, Geschichtlichkeit, Berlin 2006, ed. by Sonderforschungsbereich 626, esp. pp. 7−8, http://www.sfb626.de/veroeffentlichungen/online/aesth_erfahrung/aufsaetze/umath_rentsch.pdf; Claudia Birkner, Die Dance Diagrams von Andy Warhol, MA thesis, University of Passau 2010.
- 31 Brad Gooch, City Poet. The Life and Times of Frank O'Hara, New York 1993, p. 395.
- 32 Buchloh 2000 (as in note 30), p. 487.
- 33 Michael J. Golec, The Brillo Box Archive. Aesthetics, Design, and Art, Dartmouth 2008, p. 99.
- 34 The poses of St. John the Baptist and L'Homme qui marched by Auguste Rodin may also have been within the associative spectrum of Morris. Even though these two figures are represented in a less geometricised manner than the pieces of ancient sculpture just mentioned, they keep both feet firmly on the ground, thereby provoking the impression of standing rather than of walking; cf. exh. cat. Das Fragment. Der Körper in Stücken (Frankfurt/Main, Schirn Kunsthalle), ed. by Anne Pingeot, Bern 1990, pp. 122–127.
- 35 Gay Robins, Proportion and Style in Ancient Egyptian Art, Austin 1994. See also Elkins (as in note 1), pp. 260–270.
- 36 »In 1961 I made my first works that would later come to be called Minimal sculpture. Those grey columns and slabs I copied directly from the photographs of the ruins of the King Zoser complex at Saqqara, Egypt.« Robert Morris, Three Folds in the Fabric and Four Autobiographical Asides as Allegories (or Interruptions), in: exh. cat. New York 1994 (as in note 11), pp. 259–285, here p. 263. See also Morris's remarks about his copying of Egyptian works as a boy in the Nelson-Atkins Museum of Kansas City in: Morris 2008 (as in note 21), pp. 34.

- 37 On Polykleitos and his canon see Ernst Berger, Zum Kanon des Polyklet, in: exh. cat. Polyklet. Der Bildhauer der griechischen Klassik (Frankfurt/Main, Liebighaus), ed. by Herbert Beck, Mainz 1990, pp. 156–184; exh. cat. Der Entwurf des Künstlers. Bildhauerkanon in der Antike und Neuzeit (Basel, Antikenmuseum und Sammlung Ludwig), ed. by Ernst Berger, Brigitte Müller-Huber, and Lukas Thommen, Basel 1992; Andreas Bühler, Kontrapost und Kanon. Studien zur Entwicklung der Skulptur in Antike und Renaissance, Munich 2002, esp. pp. 23–38.
- 38 Robert Tavernor, Smoot's Ear. The Measure of Humanity, New Haven/London 2007, pp. 22–23 (with further reference).
- 39 Joseph Bonomi, The Proportions of the Human Figure with a Project for an Instrument for the Identification of Persons for Artistic or Legal Purposes, 5th ed., London 1880, p. 33.
- 40 Exh. cat. New York 1994 (as in note 11), pp. 90-91. In an interview with George L. K. Morris conducted in 1968, Robert Morris recalled »certain things about dance that I wanted to work with« in the early 1960s: »One of the things my first wife was involved in was to set up rules. Like every time the person in black bent over, you had to, let's say, turn the person in red around. And you could set up enough of these kinds of clues or rules that the movement was a result of having to respond to these and it tended to break down the set of performing, that very selfconscious narcissistic kind of set. That was one structure that was put into dance. Another thing was to use objects in such a way that they created obstacles or changed the surface. Or some kind of task had to be performed [...] The first thing I described is a situation with rules. Both of these things gave, or resulted in, a kind of situation of movement. Which was anything but the traditional dance-type movement. Well, I was interested in not relying on either one of these structures to make movement. And I wanted to work that whole area, what kind of movement could be made.« (Archives of American Art, Smithsonian Institution, http:// www.aaa.si.edu/collections/oralhistories/transcripts/morris68. htm).
- 41 See Günther Feuerstein, Biomorphic Architecture. Human and Animal Forms in Architecture, Stuttgart/London 2002, esp. pp. 32–33.
- 42 Cf. Bruce Nauman's drawing. The Negative Shape of the Right Half of My Body Carved into a Living Tree (1966/67), in which the artist developed the utopian idea that sif I were to stand in the spot for several years, my body would be partly closed in by the tree and I could not get away«; Coosje van Bruggen, Bruce Nauman, New York 1988, p. 163.
- 43 Cf. Erwin Panofsky, Die Entwicklung der Proportionslehre als Abbild der Stilentwicklung (1921), in: idem, Aufsätze zu Grundfragen der Kunstwissenschaft, ed. by Hariolf Oberer and Egon Verheyen, Berlin 1998, pp. 169–204, here p. 186.
- 44 On the subject of feet, foot imprints and foot modules in art history see also Gerhard Wolf, Verehrte Füße. Prolegomena zur Geschichte eines Körperteils, in: Körperteile. Eine kulturelle Anatomie, ed. by Claudia Benthien and Christoph Wulf, Hamburg 2001, pp. 500–523, and Michael Bury, The Measure of the Virgin's Foot, in: Images of Medieval Sanctity. Essays in Honour of Gary Dickson, ed. by Debra Higgs Strickland, Leiden/Boston 2007, pp. 121–134.

- 45 On Leonardo's Vitruvian Manc cf. Frank Zöllner, Vitruvs Proportionsfigur. Quellenkritische Studien zur Kunstliteratur im 15. und 16. Jahrhundert, Worms 1987; for the fortuna critica of this composition see Eckhard Leuschner, Wie die Faschisten sich Leonardo unter den Nagel rissen. Eine architekturgeschichtliche Station des Vitruvianischen Menschen auf dem Weg zum populären Bild, in: Beständig im Wandel. Festschrift für Karl Möseneder zum 60. Geburtstag, ed. by Christian Hecht, Berlin 2009, pp. 225–245.
- 46 Giovanni Pietro Bellori, Le vite de' pittori scultori et architetti moderni, Rome 1672, pp. 458–459. On the »Antinous« as expression of Belloris concept of the repeatable and ideal body cf. Catherine M. Soussloff, Like a Performance: Performativity and the Historicized Body, from Bellori to Mapplethorpe, in: Acting on the Past. Historical Performance across the Disciplines, edited by Mark Franco and Annette Richards, Hanover and London 2000, pp. 69–98, esp. pp. 83–85 (my thanks to Elisabeth Oy-Marra for this reference).
- 47 Cf. Georg Kauffmann, La Sainte famille à l'escalier et le problème des proportions dans l'oeuvre de Poussin, in: Nicolas Poussin, ed. by André Chastel, Paris 1961, pp. 141–150.
- 48 Cf. Claire Barbillon, Les canons du corps humain au XIXe siècle. L'art et la règle, Paris 2004.
- 49 Cf. Oskar Schlemmer, Der Mensch. Unterricht am Bauhaus. Nachgelassene Aufzeichnungen, ed. by Heimo Kuchling, Mainz 1969, p. 61.
- 50 Reginald Marsh, Anatomy for Artists, New York 1945, pp. 173–183.
- 51 Exh. cat. Joannis Avramides. Zeichnungen (Stuttgart, Staatsgalerie; Salzburg, Rupertinum), ed. by Michael Semff, Stuttgart 1986, p. 26, cat. no. 86.
- 52 According to Morris's autobiographical sketch, Barnett Newman told him in 1965: "You're that guy who makes those low gray things, all those plinths and boxes and slabs. It's all so low and hugs the ground. But don't you know the difficult thing is to get it up?" (Robert Morris, Three Folds in the Fabric and Four Autobiographical Asides as Allegories (or Interruptions), in: idem, Continuous Project Altered Daily. The Writings of Robert Morris, Cambridge, MA/London 1993, pp. 259–285, here p. 263.
- 53 Exh. cat. New York 1994 (as in note 11), p. 165.
- 54 Cf. exh. cat. Jasper Johns. An Allegory of Painting, 1955–1965 (Washington, The National Gallery of Art), ed. by Jeffrey Weiss, New Haven 2007, p. 196. Morris may also have known the black foot imprint on paper in Robert Rauschenberg's assemblage Should Love Come first? of 1951 illustrated in: Georg Frei and Neil Printz, Warhol. The Andy Warhol Catalogue Raisonné, vol. 1: Paintings and Sculpture 1961–1963, London 2002, p. 85.
- 55 Cf. Roberta Bernstein, Der Anblick einer Sache kann manchmal dazu animieren, etwas Anderes zu machen, in: exh. cat. Jasper Johns. Retrospektive, (Cologne, Museum Ludwig), ed. by Kirk Varnedoe, Munich/New York 1997, pp. 37–73, here p. 43. According to another explanation, Johns found the title of his painting in a poem by Hart Crane see Fred Orton, Figuring Jasper Johns, London 1994, p. 74.
- 56 Exh. cat. New York 1994 (as in note 11), p. 134.

- 57 Jeffrey Weiss, Painting Bitten by a Man, in: exh. cat. Washington 2007 (as in note 54), pp. 2–56, here p. 35.
- 58 Module, Proportion, Symmetry, Rhythm, with contributions of Rudolf Arnheim, John Cage, Anthony Hill, Richard P. Lohse, François Molnar, and others, ed. by Gyorgy Kepes, New York 1966.
- 59 Anton Ehrenzweig, The Hidden Order of Art, New York 1967.
- 60 Richard Arnheim, Entropy and Art. An Essay on Disorder and Order, Berkeley/London 1971.
- 61 For the situation of figural painting and sculpture in Europe after World War II cf. exh. cat. Menschenbilder. Figur in Zeiten der Abstraktion, 1945–1955 (Mannheim, Kunsthalle), ed. by Manfred Fath, Inge Herold, and Thomas Köllhofer, Ostfildern 1998.
- 62 »Quand je me hasarde à parler de mathématiques en Art, on sourit comme à un fou. Dans notre société, on oppose les mathématiques à l'Art comme on oppose la science à la religion.« Paul Sérusier 1902, as quoted in Roger Herz-Fischler, Le Nombre d'or en France de 1896 à 1927, in: Revue de l'art 118, 4, 1997, pp. 9–16, note 1.
- 63 Panofsky 1998 (as in note 43), p. 194. The aversion of artists and art critics active around 1900 against concepts of fixed proportions of the human figure was perhaps best put in words by Adolf von Hildebrandt, who argued against all »sogenannte Proportionslehren, welche man für die Kunst aufgestellt hat«, and considered them to be »von vornherein aus einem Missverständnis entsprungen [...]. Die notwendigen Proportionen müssen aus der Gesamtheit des Kunstwerkes stets neu geschaffen werden und neu resultieren, nicht aber darf die Gesamtheit die Addition von feststehenden Einzelproportionen sein.« Adolf von Hildebrandt, Das Problem der Form in der bildenden Kunst, Strasbourg 1893, pp. 41–42.
- 64 Exh. cat. Misura d'uomo. Strumenti, teorie e pratiche dell'antropometria e della psicologia sperimentale tra '800 e '900 (Florence, Istituto e Museo di Storia della Scienza di Firenze), ed. by Giulio Barsanti, Florence 1986; Anthropometrie. Zur Vorgeschichte des Menschen nach Maß, ed. by Gert Theile, Munich 2005; Eckhard Leuschner, Review of Theile, in: Journal für Kunstgeschichte 10, 2006, pp. 198–204.
- 65 See Philippe Comar, Les chaînes de l'art, in: L'âme au corps. Arts et sciences 1793–1993, ed. by Jean Clair, exh. cat. Grand Palais, Paris 1993, pp. 394–399.
- 66 Susanne Regener, Fotografische Erfassung. Zur Geschichte medialer Konstruktionen des Kriminellen, Munich 1999.
- 67 Cf. Stephen Jay Gould, The Mismeasure of Man, New York 1981; George L. Hersey, The Evolution of Allure. Sexual Selection from the Medici Venus to the Incredible Hulk, Cambridge, MA 1996, esp. pp. 101–145.
- 68 Gino Severini, Du cubisme au classicisme (Esthétique du compas et du nombre), Paris 1921.
- 69 Cf. Luciano Caramel, Ordine nuovo, primordio, nuovi miti nell'arte italiana tra gli anni Venti e Trenta, in: exh. cat. Il futuro alle spalle. Italia Francia. L'arte tra le due guerre (Rome, Palazzo delle Esposizioni), ed. by Federica Pirani, Rome 1998, pp. 49–65.
- 70 Cf., for example, Bettina Schaschke, Dadaistische Verwandlungskunst. Zum Verhältnis von Kritik und Selbstbehauptung in DADA Berlin und Köln, Berlin 2004, esp. pp. 113–148.

- 71 Bruno Marchand, Le sens des proportions: ou le retour éphémère aux valeurs humanistes dans les années 1950, in: Matières 5, 2002, pp. 6–16. It is clearly not by chance that the most important figure paintings in Abstract Expressionism, De Kooning's Women, have been interpreted in terms of the modern Grotesque see Leesa Fanning, Willem de Kooning's Women: the Body of the Grotesque, in: Modern Art and the Grotesque, ed. by Frances S. Connelly, Cambridge 2003, pp. 241–264.
- 72 Le Corbusier, Le Modulor. Essai sur une mesure harmonique à l'échelle humaine applicable universellement, à l'architecture et à la mécanique, Boulogne sur Seine 1950. Cf. Mario Curti, La proporzione. Storia di un'idea da Pitagora a Le Corbusier, Rome 2006, pp. 215–221.
- 73 Henry Dreyfuss, The Measure of Man. Human Factors in Design, New York 1960.
- 74 Alexander Dobkin, Principles of Figure Drawing, Cleveland/ New York 1948, p. 15. Cf. also Burne Hogarth, Dynamic Anatomy, New York 1958, pp. 68-70: »A figure proportion is necessary to art; but it must be a proportion of its own era, and second, it must respond to the artist's problems in his time. That is to say, from the first it must be a figure not of demigods, nature gods or gods of nature, but of modern aspiration, inspiration, and human nature. It should be a figure of the general agreement in the culture, like a statistical average in which everyone has his part. [...] Fortunately, the canons of proportion are not irreversible, and the only absolutes which are known to exist lie in their definitions only. [...] To behave creatively in art means behavior with skill; and skill comes from discipline, not derangement. The artist who knows the rules - and proportion is one of them - knows where to bend and how to break them.« Arthur Zaidenberg, Anyone Can Draw!, New York 1941, p. 24: »Raphael was sometimes incorrect in his proportions; Michelangelo oftener; Bouguereau never. Yet, which of the three do you consider the greatest artist? Our own academicians are not always impeccable, which should bring some consolation to the struggling art student.«
- Rothko expressed his conviction that Leonardo's and Dürer's concept of beauty did not lie »in the general notion of what was beautiful, but rather in their own certainty as to the abstract proportion of abstract beauty. [...] Both focused upon the derivation of the essence of perfection in appearances. [...] The Renaissance artist, in his objective attitude toward appearances, had to take account of the world of abstractions which he thought must underlie them, but which he used for the affirmation of appearances. The abstractionists of our age [...] use appearances for the purposes of demonstrating the reality of the world of ideas. Both types of artists are objectivists. Both are occupied with the objective world of appearances, but one subverts ideas to appearance, and the other appearance to the world of ideas.« Mark Rothko, The Artist's Reality. Philosophies of Art, ed. and with an introduction by Christopher Rothko, New Haven/London 2004, pp. 69-70.
- 76 Robert Morris, Jasper Johns. The First Decade, in: Morris 2008 (as in note 21), pp. 225–256, here p. 228.
- 77 Dieter Mersch, Was ist ein Bild? Yves Kleins Anthropometrien (, in: Neue Ästhetik. Das Atmosphärische und die Kunst, ed. by Ziad Mahayni, Munich 2002, pp. 35–49.

- 78 Cf. Nuit Banai, Dangereuse abstraction. Yves Klein à New York, 1961–1967, in: exh. cat. Yves Klein. Corps, couleur, immatériel (Paris, Centre Pompidou), ed. by Camille Morineau, Paris 2006, pp. 202–207.
- 79 Cf. Amelia Jones, Body Art/Performing the Subject, Minneapolis/London 1998, p. 89.
- 80 It is known that Klein's first New York art show at Leo Castelli's gallery remained without positive resonance in the US (cf. Banai 2006 [as in note 78], p. 207). In a recent text, Robert Morris expressed his reservations about the "high-density Wagner effect" of "the grander gestures of Yves Klein in the early '60s"; Size Matters (2000), in: Morris 2008 (as in note 21), pp. 121–136, here p. 129.
- 81 Meyer 2004 (as in note 12), p. 53.
- 82 The work's status as a divided plinth hung on the wall is also significant because Morris generally rejected plinths as structures which elevate and remove the work of art from the viewer's reality.
- 83 Robert Morris, Notes on Sculpture, Part 1 (1966), in: Morris 1993 (as in note 52), p. 4.
- 84 Morris 1993 (as in note 52), ibid. Cf. Alex Potts, The Sculptural Imagination. Figurative, Modernist, Modern, New Haven/London 2000, pp. 236–244.
- 85 See Leanne Carroll, The Artist as Critic. A Parodic Reading of Robert Morris's Writing and Minimalist Sculpture, in: University of Toronto Art Journal 1, 2008, esp. p. 7 – see http://jps. library.utoronto.ca/index.php/UTAJ/article/view-File/4846/1668.
- 86 Michael Fried as quoted in: Discussions in Contemporary Culture, ed. by Hal Foster, Seattle 1987, p. 73.
- 87 Cf. Hilde van Gelder, The Fall from Grace. Late Minimalism's Conception of the Intrinsic Time of the Artwork-as-Matter, in: Interval(le)s 1, 2004, pp. 83–103, esp. p. 89.
- 88 Morris himself points out in retrospect: »The only fault I find with Fried's essay is that it did not extend the concept of theatricality far enough. « Morris 2008 (as in note 21), p. 135.
- 89 »I have come to the conclusion that perhaps the only single thing that art has is scale something which has nothing at all to do with size. It has to do with things being internally consistent with their own parts.« Phyllis Tuchman, An Interview with Carl Andre, in: Artforum 8, June 1970, p. 57. See also Andrew Hudson, Scale as Content, in: Art Forum 6, 4, 1967/68, pp. 46–47, and regarding scale as an issue in Morris's oeuvre William J. T. Mitchell, Wall Labels: Word, Image, and Object in the Work of Robert Morris, in: exh. cat. New York 1994 (as in note 11), pp. 62–79, esp. p. 67.
- The theoretical writings of Morris and Judd have been studied in terms of both artist's self-marketing, their strategy of positioning themselves in the art world by discussing (and mostly rejecting) older works, their connections with current trends in the humanities such as the Gestalt philosophy of Maurice Merleau-Ponty and their publicly announced breach with the traditions of illusionisms. Paradoxically, the activities of both Morris and Judd can also be identified as a strategy to insert them into the canon of art while, at the same time, they substantially changed precisely that canon. Characteristically, as James Meyer observed, the actual »canonisation for Minimal Art« came with Michael Fried's essay Art and Objecthood in

- 1967, a text that contained a harsh critique of Minimal Art but clearly defined the battle line cf. Meyer 2004 (as in note 12), pp. 242–242. However, this kind of canon and canonisation is not the focus of this paper.
- 91 See, e.g., Robert Morris, Some Notes on the Phenomenology of Making: The Search for the Motivated (1970), in: Morris 1993 (as in note 52), pp. 71–93, here p. 84: »The crisis of the formalistic is periodic and perpetual, and for art to renew itself, it must go outside itself, stop playing with the given forms and methods, and find a new way of making.«
- 92 Cf. Ursula Frohne, Maßlose Langeweile. Zur Produktivität von Passivität und Leere in Bruce Naumans Videoinstallation Mapping the Studio I (Fat Chance John Cage), in: Maß oder Maßlosigkeit. Kunst und Kultur in der Gegenwart, ed. by Doris Schuhmacher-Chilla and Julia Wirxel, Oberhausen 2007, pp. 227–250.
- 93 Exh. cat. Bruce Nauman. Neons (Baltimore, The Baltimore Museum of Art), ed. by Brenda Richardson, Baltimore 1982, p. 25; Andrea Domesle, Leucht-Schrift-Kunst. Holzer, Kosuth, Merz, Nannucci, Nauman, Berlin 1998, pp. 163–164.
- 94 On Nauman's dealings with the concept of >true art(and the >true artist(cf. Beatrice von Bismarck, Bruce Nauman. The True Artist. Der wahre Künstler, Ostfildern 1998.
- 95 Nauman and his teacher William T. Wiley are known to have tried to translate the forms of Duchamp's threads into neon tubes some time before the production of My last name [...] see Van Bruggen 1988 (as in note 41), p. 108.
- 96 Robert Morris, Antiform, in: Art Forum 6, April 1968, pp. 33–35, republished in: Morris 1993 (as in note 52), pp. 41–50. Cf. Berger 1989 (as in note 11), pp. 47–79.
- 97 Julia Bryan-Wilson, Hard Hats and Art Strikes. Robert Morris in 1970, in: The Art Bulletin 89, 2007, pp. 333–359.
- 98 Thomas McEvilley, Sculpture in the Age of Doubt, New York 1999, p. 79; exh. cat. Magie der Zahlen in der Kunst des 20. Jahrhunderts (Stuttgart, Staatsgalerie), ed. by Karin von Maur, Ostfildern 1997, p. 133. Cf. also the >8 Measurement Poems by Robert Filliou, in: exh. cat. Open Systems. Rethinking Art c. 1970 (London, Tate Gallery), ed. by Donna De Salvo, London 2005, p. 151.
- 99 Mark Godfrey, From Box to Street and back again: An Inadequate Descriptive System for the Seventies, in: exh. cat. London 2005 (as in note 98), pp. 24–49, here p. 33. Cf. also Jasper Johns's work. In the Studio (1982), in which a cast of an arm is placed on a canvas next to the painted imitation of a drawing representing an arm of the same size in reverse; Fred Orton, Figuring Jasper Johns, Cambridge/London 1994, p. 189.
- 100 Yve-Alain Bois, The Measurement Pieces: From Index to Implex, in: Mel Bochner. Thought Made Visible 1966–1973, New-Haven 1995, pp. 167–177; exh. cat. Mel Bochner (Bignan, Centre d'art contemporain du Domaine de Kerguéhennec), ed. by Frédéric Paul, Bignan 2008.
- 101 Godfrey 2005 (as in note 99), p. 34.
- 102 Bois 1995 (as in note 100), p. 168.
- 103 Donna de Salvo, Where We Begin: Opening the System, c. 1970, in: exh. cat. London 2005 (as in note 98), p. 16. See also Richards Jarden's work >Facial Angle (profile photographs with drawn in proportional measuring lines, 1966) and Robert Kinmont's >Measuring Some of My Friends (Color) (1970).

- Lucy R. Lippard, Six Years: The Dematerialization of the Art Object from 1966 to 1972, rev. ed. Berkeley/Los Angeles 2001, pp. 140–141.
- 104 Exh. cat. London 2005 (as in note 98), pp. 40–43, 109. Cf. also Orlan's MesuRages d'institutions et de rues (1978–1983), in: exh. cat. Orlan 1964–2001 (Salamanca, Centro-Museo Vasco de Arte Contemporáneo), ed. by María José Kerejeta, Salamanca 2002, pp. 39–40, and Rebecca Horn's Measuring Box (1970), Staatsgalerie Stuttgart, inv. no. P 342.
- 105 Roswitha Mueller, Valie Export. Bild-Risse, Vienna 2002, p. 224.
- 106 Robert Morris, Professional Rules, in: Critical Inquiry 23, 1997, pp. 298–322, republished in: Morris 2008 (as in note 21), pp. 63–99.
- 107 Morris Rules 2008 (as in note 106), p. 77.

- 108 In Morris's published writings from the 1960s, there is no direct reference to Wittgenstein, but the artist may already have been acquainted with the latter's thoughts through John Cage or Jasper Johns.
- 109 Morris Rules 2008 (as in note 106), p. 79.
- 110 Morris Rules 2008 (as in note 106), p. 93.
- 111 Morris Rules 2008 (as in note 106), p. 85.
- 112 Morris Rules 2008 (as in note 106), p. 79-80.
- 113 For a case study of rules in the sense of a sociology of modern art cf. Nina Tessa Zahner, Die neuen Regeln der Kunst. Andy Warhol und der Umbau des Kunstbetriebs im 20. Jahrhundert, Frankfurt/Main 2006.
- II4 For Rauch's painting >Regel (2000) cf. Gottfried Boehm, Neo Rauch. Neue Rollen. Bilder 1993–2006, Cologne 2006, p. III.

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