

Max Raphael, Dialectics and Greek Art

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In the following article I would like to outline what is required for a theory of art in the late work of Max Raphael, by showing that it is a response to a problematic first formulated, but left unanswered, by Marx, and which can be seen as developed by Raphael in his writing, especially the text he devoted to a dialectic interpretation of Greek art, with special reference to temple architecture. In detailing this latter study it will be possible to see how Raphael's understanding and analysis is guided by his account of an empirical theory of art, and contributes to its further elaboration.

For Raphael an empirical theory of art requires that it is possible to envisage making art an object of scientific cognition, and he takes scientific method for what it is, or what it has become in the course of its development. If there is no exact theory of art then Raphael puts this down to self-imposed limitations; the most significant of which is that every domain of knowledge must be built up from elementary units e.g. the point in mathematics, the cell in biology, the sensation in academic psychology. A further entailment from this is that more complex entities must be constructed out of such elements with no reference to any concept of the whole.

For the facts of art Raphael argues that one should start with a more highly structured element whose components are variable, and which enter into many combinations, mutations; that is to say, he wants to replace an abstract system of concepts, each designating a simple thing by simple terms, with a system

of variable elements and variable functions. In the domain of art scientific method could be enlarged by pairing the concept of particularity with a concept of totality. For Raphael this requirement flows from the way in which the universal manifests itself in the particular, and further it is not sufficient to 'subsume' the particular under the universal.

A further consideration for an empirical theory of art is that since art transforms historical realities into symbols, and this leads to a hierarchy of values, it cannot be studied without reference to values, nor can a sharp line be drawn between history and existence, as in the natural and social sciences.

Raphael envisages a theory of art constituting of three parts – phenomenology, history, and criticism, and as these parts are independent, as history is not dissolved in art, nor art in history, it is necessary to introduce constitutive categories, such as element, totality and relation, and for Raphael the new and important category of realisation, for understanding the universal and particular. Again it should be observed that each category is implied in each of the others, and that all of these categories, including descriptive concepts of form, over-all form, configuration, realisation, are to be defined solely by the way they are built up and developed in works of art.

Taking just one example, which becomes valuable for the later reading of Raphael, that of over-all form or configuration, *Werkgestalt*, one is neverthe-

less dealing with a stage in a process, a stage in which a number of concrete factors have combined in a unique way and which has become relatively independent. In the concept of *Werkgestalt* we have the analysis of form as a process, for Raphael does not use the term 'form' to signify abstract relations, such as proportions or symmetry, which can then be applied, rather, it indicates, as form, something concrete and material with a content and structure, where abstract relations are merely regulative factors; that is to say for Raphael form is a constituted existent, and every actual form is constituted as effective form, and of course there are various types and degrees of form, choice of material, means of representation, sensory qualities, and types of modelling, the manner of combining them being then determined by a given content which becomes accessible in the course of constituting form.

What unifies the yet unknown content and the nascent form with autonomous existence, is the method governing the artist's choice and the kind of synthesis achieved, as Raphael adds in the notes he prepared aboard the ship *Murzinho* on the 17th of June 1941, when fleeing from persecution in Europe: 'The fundamental problem of an empirical theory of art is thus neither content or form, nor content and form, but the method by which an artistic form is created for a given content.'¹

A central problem for Raphael is his identification of what he describes as the brilliantly formulated but still unresolved theory of art, as expressed by Karl Marx in his 'Zur Kritik der politischen Ökonomie':

But the difficulty is not in grasping the idea that Greek art and epos are bound up with certain forms of social development. It rather lies in understanding why they still constitute with us a source of aesthetic enjoyment and in certain respects prevail as the standard and model beyond attainment. A man cannot become a child again... But does he

*not enjoy the artless way of the child and must he not strive to reproduce its truth on a higher plane? Why should the social childhood of mankind, where it had obtained its most beautiful development, not exert an eternal charm as an age that will never return? There are ill-bred children and precocious children. Many of the ancient nations belong to the latter class. The Greeks were normal children. The charm their art had for us does not conflict with the primitive character of the social order, from which it had sprung. It is rather the product of the latter, and is due to the fact that the unripe social conditions under which art arose and under which alone it could appear also could never return.'*²

For Raphael, Marx's thinking here sounds 'pretty bourgeois', almost indistinguishable from the contemporary adumbrations of the Swiss historian Jacob Burckhardt.³ There is a failure to deal with the problem raised in the work of Marx, and indeed Raphael finds the term 'eternal charm' doubly untenable, both as eternal and as charm.

Raphael contends that art is an ever renewed creative act, the active dialogue between spirit and matter, and that the work of art holds creative powers in a crystalline suspension from which again it can be transformed into creative energies. Indeed, for Raphael art is not an opiate but a weapon: art is the productive act which dissolves frozen and reified elements and which gives form to this process by combining opposites into a unity.

However, to understand art what is required is the development of an active analysis. Such an analysis needs to flow from the created work to the process of creation. Artistic creation should be shown as directed towards an individual idea, or conception, where the subjective-conditional, and the objective-absolute elements are combined, that is, directed towards totality and necessity, and such an active analysis of art, 'must replace the world of things with a hierarchy of value'.⁴

The most significant change which can be witnessed in the later work of Raphael is that it is art and the study of art that allows for a movement from the work to the process of creation.⁵ Referring to the pragmatic and aesthetic attitude towards art, Raphael observes that neither does justice to the work of art, because the work of art is reality enhanced, which engages the senses both as a whole and in every one of its details and is yet a symbol of non-sensory meaning, which extends down to the still deeper layers without ever ceasing to appeal to our senses.

*This enhanced reality, which has so misleadingly been called 'illusion' is not ready made but develops before our eyes and in our minds, not in the sense that we witness an objective spiritual development, a growth from germ to completion. We see how form is constituted by a specific artistic method and how form follows necessarily upon form. That is what I meant when I said that art leads from the work to the process of creation. The icy crust of mere presence has melted away and we experience the creative process itself in the new, enhanced reality in which it both appeals to our senses and suggests an infinite wealth of meaning.*⁶

By following Raphael's analysis of the temple of Zeus at Olympia we can watch his later theoretical insights at work,⁷ and see an example of what he means by active analysis. I will briefly outline the problem that is initially at play for Raphael, the understanding of the classical body in his analysis of the temple of Zeus at Olympia, and of how a principle of balance and equipoise, along with the showing of unrestrained movement, can take place in the severe tectonic rigour of Doric architecture. This allows one with a concrete example to understand his active analysis at work, and may be construed as his detailed response to the question raised in the work of Marx about Greek art.⁸

Thanks to the researches of Max Raphael it is

possible to address this question directly, as he too sought to understand the notion of the classical body from investigation of the central figure in the west pediment of the temple of Zeus at Olympia, and insisted that at the heart of this art is dialectics, which is fundamentally inimitable, being, as he says, one of the supreme ironies of history that such a dialectical art should come to be regarded as the most dogmatic, 'as the mother of all academies'.⁹

If we examine the central figure we see that, like the pediment, it is most closely related to the architecture, and within the pediment it is closely related to other figures; this suggests a relation as part of a community and a 'formal whole'. Thus the two conceptions of the figure exclude the conception of it as a body confined to itself, that is, self-contained and primarily and absolutely autonomous.

As would be expected given the formal difficulty attached to pediments populated with relief figures, the triangular space imposed by the tectonics of the roof involved difficulties for the sculptor. As might be observed it is impossible to show characters of the same dimension in a triangular frame, whose height progressively shifts. One solution was to vary the module. An example of this, rare and fairly extreme, can be seen in the apotropaic Gorgon figure of the Temple of Artemis at Corfu, probably early 6th century BC, where the menacing, striding figure of the Gorgon is accompanied by a visibly diminished figure of Chrysaor, and smaller figures fill in at the angles.

Another solution was to vary the attitude. Thus figures could be shown in various attitudes, kneeling, crouching, recumbent, standing. This 'method' can be seen in the early Siphnian Treasury at Delphi, around 525 BC, and the Megarian treasury at Olympia. It has been argued in explanation that the Greek artists rapidly and through trial and error found solutions which then quickly established themselves as conventions, and the quest

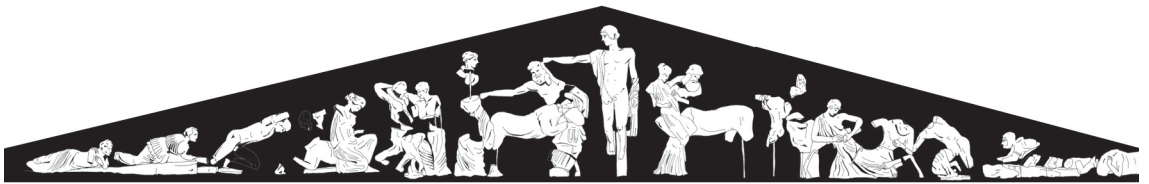


Fig. 1: An illustration of the west pediment of the temple of Zeus in Olympia. © The editors.

for verisimilitude, the striving towards the greatest possible similarity between image and reality, led to the abandoning of the shifted or varied module as at Corfu, and the search was on for better pictorial responses to the architectural constraints. So, as the metope favours subjects with two or three actors, and the continuous frieze favours many groups, for pediments with the necessity of showing people lying and kneeling, the battle scene became popular, although not obligatory. Uncertainty ended about methods of responding to the pre-imposed restraint of architecture in the early fifth century. Accordingly it is then argued that the definitive formula was adopted in 480 BC at the Temple of Aegina, and twenty years later, at the Temple of Zeus in Olympia.

In the analysis of Raphael, the varying height of the pedimented area only partly determines the choice and arrangement of the objects presented in it; its shallow depth determines the type of modelling, which in this case is in high relief. The varying height of the pediment which increases as one moves from the sides to the centre, imposes a distinction between main and secondary figures, and a gradation in the importance of the action, and even a specific manner of regulating this action.

The strongly accentuated centre imposes a symmetrical arrangement and precludes a continuous development from a beginning to an end, and since the slanting sides of the triangle suggest a rising movement if they are seen from both ends, and a falling movement if they are seen from the apex, the dimension of width is broken up into two opposed directions, and this is what raises the problem of their unity. Similar problems arise in the dimension of height. The form of the pediment compels the artist to decide not only whether each of his figures can suggest a rising or falling movement, but as to how each of them should embody both movements in its own way.

In the dimension of depth the figure, the human figure, is situated between the open space in front, with its light and air, and the impenetrable wall behind, so that the volume of the body can be developed only in parallel and diagonal directions in relation to its two different boundaries. Raphael makes the telling observation that the outstretched arm and the head of the central figure of the west pediment suggest the form of a half pediment, thus the form of the pediment has been introduced into the human figure. Conversely, the asymmetry of this figure has been carried into the symmetrical form of the pediment.

The height of the pediment at mid-point, that is the height of the pedimental triangle, performs two functions; it coordinates all symmetrically located elements, and it introduces a paradoxical asymmetry at the point of convergence. There is then a double function: one of centring and one of breaking-up. However, the tallest and significant central figure in the west pediment is not supported by a column, but stands above a void which opens into a dimension of non-being. This suggests the formlessness of fate and the absolute necessity to which even the god is subject. In the east pediment of the Temple, Zeus is placed over a similar void. Fate encompasses all.

However, it must be noted that the middle axis of the edifice is at first purely ideal, and remains intangible and invisible. It is framed by an architectonic form in the triglyph and achieves plastic form only in the pediment. At the very point where the ideal axis achieves physical existence it is broken and shifted. Instead of the previous apparent perfect symmetry, there is a balancing of the similar and symmetrical, but uneven masses around an axis. This is a fluid balance. It is a synthesis of actual imbalance and ideal balance.

The architecture discloses the dimension of non-being in the human figure, the human figure

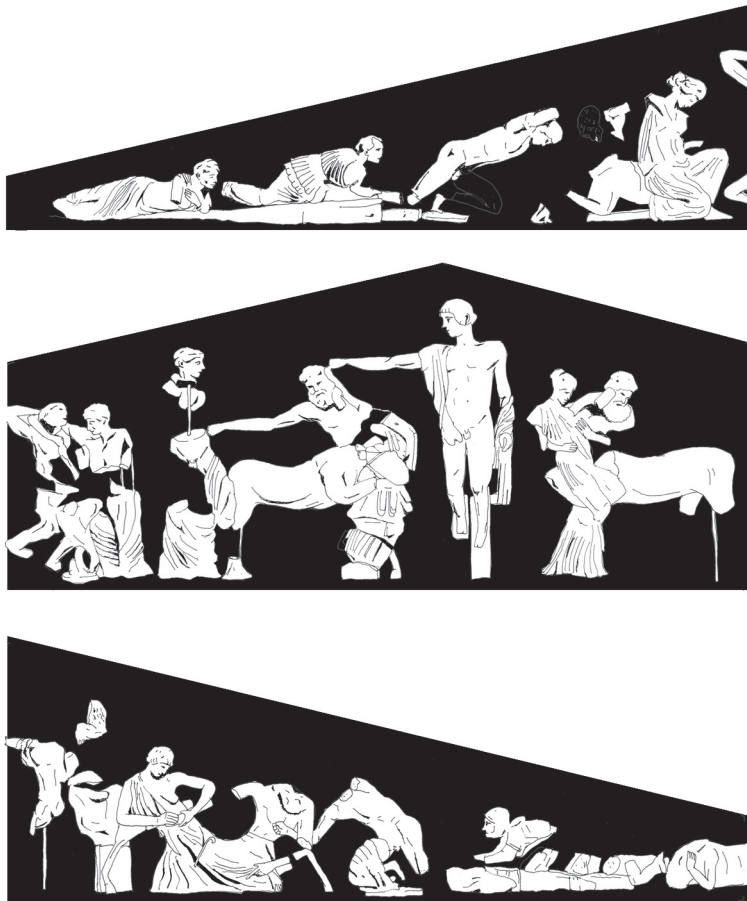


Fig. 2: Details of west pediment, temple of Zeus at Olympia. © The editors.

discloses the fundamental conflicting character of the being of the architecture. The triangular form of the pediment does not determine the forms of figures and groups directly. But, rather, the determination is indirect in so far as it is itself determined by the architectural whole of which it is part.

Within this architectural whole the geometric triangle does not occur in the pediment only, as a form that mediates between the vertical columns and the horizontal stairs and entablature. From the corners of the stereobate over those of the stylobate, and of the anta behind the peristyle, sloping lines lead into depth. These lines, taken with the horizontal lines of the staircase mark the beginning of a triangle that is complete only ideally in the interior of the cella.

In his study of the Doric Temple, Raphael had drawn attention to the significance of the ideal triangle for the Temple of Paestum, where it touches the lower corners of the abacus in the two central columns, which is so important for the static play of forces, while in the corner columns it touches the upper corner of the abacus, so that the contraction of the intercolumniation of the façade is closely related to the height of the abacus, and the phenomenon of contraction and tapering becomes recognisable as two variations of the same idea.¹⁰ The real pedimental triangle that crowns the temple façade is thus just the combination of the ideal triangle in the dimension of height and dimension of depth and related to the space, the perpendicular forces of load and support, and the proportions.

There is another relation between the triangular pediment and the rectangular peristyle which is not directly perceivable, but can be rationally recognised and responded to in its effect. The two slanting sides of the pediment suggest two movements, one rising from the corners to the centre, the other falling from the centre to the corners. This is also matched in the peristyle by the fact that the spacing between the columns is greater at the centre than at

the sides. The greatest height and the heaviest part of the pediment is above the widest intercolumniation, the point of weakest support. If we disregard this structural paradox, which seems resolved in the pediment by the linking of perpendicular forces with the horizontal thrust, it remains that the two movements, along the columns and ideally on the horizontal, continue in the peristyle. They are not, however, related internally.

In contrast to this, the simultaneous centripetal and centrifugal movements in the pediment are effected along two slanting lines, which are so to speak the parallelograms of directions. They are the results of two vectors, horizontal and vertical. Thus, their function is one of mediation. The triangle begun in the peristyle is completed in the pediment, but nevertheless, it only remains a part. It is a part not only of the actual front, but also of the ideal rectangle, whose diagonals we can obtain by extending the sides of the pedimental triangle. The actual triangle becomes part of the enveloping ideal space that is not embodied in material form, just as the space surrounding the structure, below the pediment, remains invisible.

The basic attitude to infinite space is expressed in the dimension of depth and height. The intention is to limit the space physically and to express only a part of the whole, but at the same time to express the whole in the part. The slanting lines of the pediments are the result of two forces, not just of two vectors. The upward thrusting force, the support, is gradually de-materialised with the tapering of the columns. The down thrusting force, load, is increasingly materialised in order to hold back underground powers in the horizontal stairs. The pediment mediates between the two forces. It should not be looked upon as a static frame, but as a field of opposing forces, which has become form.

The central figure in the west pediment continues the rising movement from below, but starting from

a void. It is not the continuation of a column. The figure, at the same time, has in the head a closeness to the apex of the pediment, and is more exposed to the ideal pressure from above than to the force up-surfing from below.

Raphael fully rejects the interpretation of the Greek Temple as a plastic body without spatial dynamism, as a solution of a purely mechanical problem. The Greek temple embodies and is the embodiment of the dialectical interaction of antithetical forces of various kinds, spatial, physical and intellectual. Architecture here embodies such forces in a permanent, finite, harmonious and clearly articulated structural body; the most important element of this is the depth of the pediment. This reference to depth refers to the intrinsically small interval between the open space in front and the pediment wall behind. The sculptor is guided in his treatment of this space in the same way as the architect applies his treatment to the space between the stereobate and the cella wall.

Above the stereobate, between the steps and the corona, the air-filled space opens up, and this is part of the artistic method, as this space is differentiated from the surrounding atmosphere by the over-all character of the structure. Directly behind it on the stylobate there is a space filled with bodies and air, rich in contrast between lights and dark, warm and cold, and which performs important functions, front and back. It is bounded by the air-filled space in front, and by the air of the pteron at the back, imprisoned between the ceiling and the walls. The latter space lies in the shadow, which grows gradually darker inside. The alternations between full and empty, light and dark, warmth and coldness, over the whole width of the front are knit together by the modelling plane, i.e. the imaginary plane parallel to the frontal and back planes, which passes through the row of columns. This static modelling plane is supplemented by a dynamic factor.

Standing in front of the middle axis of the temple, we see the two centre columns almost frontally, the next two at an angle, and the two corner columns at a sharper angle. The columns never stand exactly in the axes of the stylobate and thus the lights on them are distributed asymmetrically. This creates a great variety of light, ranging from brilliance to darkness. This is further enriched by the varied light and dark areas inside. Lights and shadows of various intensity and quality play on the surface on all sides.

Raphael concludes then as to the architect's intention. The conception of the Greek architect starts from an ideal structure closed on all sides. This is transformed into actual artistic structure by, 1: opening the ideal wall to admit surrounding air and light, so that an air-filled space is placed in front of the space encompassed by the building, 2: opening the part behind this air-filled space at several points and creating an alternation of masses and voids and a vibration of the void around an axial plane, 3: indicating a diagonal which runs from the corners of the steps and through the corner columns, cutting across all the parallel planes on both sides to the centre, and 4: leaving one solid wall which checks the play of masses and lights, only to open up behind it the inner spaces. It is the same principle of alternating air-filled spaces and portions of the wall and diagonal intersections, which is applied by the sculptor in his treatment of the space of the pediment.

The argument for unity is further enhanced by the consideration of the column, showing that it was created because the architect felt the need to break up the ideal wall, and to express the contrast between the full and the void as a stage in the process of opening up depth. Ridges and grooves run along the entire column in unbroken straight lines. These rigid rational geometric lines constitute as it were the outer aspect of the activity and mechanical forces between centre and periphery. They enable us to view the column as a complex

of forces that are tied together visibly at its neck, in order then to open up of their own accord and to spend themselves.

The form of the echinus can be read as a reversal of that of the shaft. The Greek column is not compelled to support, but does so, as it were of its own accord. Although the column originates in space-forming forces that have nothing to do with the perpendicular static forces of load and support, it is a form that not only provides support, but is also in perfect balance with all the other forces, so that developing energy and actual structure constitute an indissoluble unity.

What Raphael shows is that, just as the column was developed from the ideal wall, so the human figure was developed from the shallow space of the pediment in accordance with two principles, that of the supporting and relaxed leg, and that of rotation. These principles are combined with the boundaries of the block in a three-dimensional system of coordinates that is shifted in several directions.

The starting points of the architect and the sculptor are different; the architect starts from the spurious infinity of physical space, which he transforms into a finite spatial body that contains the true infinite. The sculptor starts from the finiteness of the physical body and tries to express in it the infinity of the totality of the spiritual and artistic space. The two paths cross and complement each other in a single reality whose material surface is the unity of all developed oppositions. Both sculptor and architect use the same method.

The column is first and foremost an architectonic function and form, serving mainly to give form to space and to embody the play of forces. When these forces have achieved formal existence, the human proportion is added. Conversely, in the human body the forces of load and support are secondary, subordinated to forces which both physically

and spiritually are greater than the perpendicular forces, because they come from the earth and from consciousness.

Only at the historical moment of Greek creation were these qualitatively and essentially different elements linked by being subject to the same artistic principle. Here we can understand the body more clearly. According to Raphael's theory the mechanical play of forces in the objective world is analogous to the play of ideas in consciousness. Subject and object, being and consciousness, are in accord, or coincide through the mediation of the human body. It is the human body which, once thinking and being have been conceived as distinct entities and have entered into a sufficiently close relationship, can become the vehicle of the synthesis of both, because the human body shares in both.

In this conception of what is an epistemological problem, mechanism and organism cease to be an absolute antithesis, and mechanism, within certain limits can be treated artistically in analogy to the organism, as an organism can be treated in analogy to mechanical forces. The consequences for architecture which Raphael draws from this are as follows: firstly, the entablature is placed like a continuous horizontal band on the individual vertical columns, and since no column is directly connected with the one next to it, it is the whole row of columns that support the entablature. Secondly, the round echinus and the square abacus are fitted to each other as closely as possible. This is very much in contrast to the tall blocks on the top of Egyptian columns. And thirdly, each of the two elements influences the form of the other; the weight of the entablature is expressed in the column by the entasis, and the rising movement of the column is expressed in the triglyph above the abacus. The difference between the two influences is shown in the triglyphs, which seem to be flowing downwards, and is stressed by the guttae. The presence of a homogenous chain of supporting forms, the mediat-

ing function of the capital, and the influence of each formal element on the other distinguish the treatment of the perpendicular forces in the Doric temple from that of any other architectural order.

It should be noted that the treatment of forces varies according to whether or not they come into contact with full masses or a void. Such variations reflect the original opposition between the full and the void. Further variations occur in the treatment of these oppositions. The full is rendered in the squat form of the echinus or the abacus which does not yield to pressure and embodies the pure zero point. The void is rendered either in the narrow dividing line, between the echinus and the abacus, or, in the shadows which envelop the entire capital.

It is a result of the type of interpenetration between the full and the void, that grants the predominantly dramatic, or lyrical, even one can say, epic character to the temple. These differences depend on the line of vision of the viewer and vary with it. There can be no schematic interpretation because of this issue of visibility of the perpendicular forces, for example of the sculpture.

The body is related not only to the architecture but also to other human figures in the pediment. They together form a meaningful and coherent unity. The method of representing action is of course influenced by the pediment division into symmetrical halves. One sees the principle of axial articulation asserted not only in the central figures, but also in the two figures and even in the three figure groups. There is neither priority given to space nor to time. Statics and dynamics are developed simultaneously. The interplay between them characterises the composition as a whole. There are self-abolishing antithetical movements, and symmetries within an over-all symmetry, and this is what marks the individual figures.

Because of the way in which static and dynamic

elements are unified, action is not portrayed in the form of a narrative with a beginning and an end, or in the form of a sum of simultaneous episodes. Instead, we have a limited number of groups, each showing a specific moment of the action, and suggesting the moments that preceded and followed it. The artistic action develops from the centre to the corners, whilst the real action, develops from the corners to the centres. Yet, the tension between the two is preserved. The mirror-like symmetry between the two halves of the pediment serves to stress the contrasts between the struggling parties and between moments of dramatic suspense and moments of activity.

This makes it finally clear why asymmetries within the over-all symmetrical order are so important here. For it is only by means of asymmetries and *contraposto* that movement in time can be expressed in static terms. But, only those asymmetries and *contraposto* which serve to express differences with respect to time, stages of development, or intensity are artistically justified. Otherwise they degenerate and become mechanical, as Raphael suggests they often do in Renaissance art. For example, in the two figure groups the asymmetries play an even clearer role than in the single figure composition, one group of which faces towards the centre whether placed on right or left, whereas the other faces away. This indicates clearly that the two triads on either side of the pediment are separated by a time gap. Failure to recognise the dialectical play of time and space exemplified in the sculptural work leads inevitably to the pseudo-classical *contraposto* and the academic organ-pipe arrangement.

The relation between whole and part is not one of direct dependence. The whole does not directly determine the parts. This absence of dependence and direction is made possible by the operation of a formal mathematical principle which governs the geometrical shape and the proportions of the whole and the part, so that their harmony is achieved

independently and each preserves an appearance of freedom. Its mathematical character shows that it was conceived as a link between the idea and phenomenon. The order to which the conflicting forces aspire was an order of being. The whole was always conceived as an articulated whole, which was not allowed to impinge on the independence or freedom of the part, no more than the parts were allowed to break up the whole.

The proportions that governed the parts were adjusted to the proportions that governed the whole, as elements of the latter. The absolute dimensions of the elements determined the proportions. From the whole a unit of measurement was derived by a series of operations and the unit of measurement led back to the whole by a series of operations in reverse. Therefore the community of elements in the Doric temple cannot be expanded, the temple is a finite whole, incapable of any metaphysical approximation to the infinite.

For Raphael the work of art was not an imitation of reality or a merely imagined ideal; it was the idea conceived of as the unity of the actual and the possible, it expressed the ideal of unity between the controlled and the yet uncontrolled sectors of the world. It was the embodiment of the artist's vision of unity.

A further series of observations on the axial system is in place, and helps to grasp what is essential for classical art all the way down to the deployment of particular techniques. It is this which gives Raphael's analysis such power that it can help one understand the finite body of the architecture both in its making and as process. The axial system in its relation to the original block plays a prominent part. Each axis introduces a specific orientation into the undifferentiated body of the block, and this results in a separation which sorts out one direction from the other and opposes it to them, so that the block is built around the axes.

Each axis reduces one of the planes of the block to a line and finally all the lines to a point, so that the two operations can be carried out in every dimension in two directions, and further the directions can be said to converge or diverge. This leads to a two-fold process, depending on whether we view it from without or within; that is to say, the block is reduced from planes to lines to a point, or vice versa, the point can be expanded into space. Space is transformed into an active process with this shifting of the axial system. The key question here is, what is the cause of this shift, which results in a figure characterised by subjection to space and freedom to determine space? An understanding of classical art depends then primarily on the relationship obtaining between figure and space, or, to state it more precisely, on man's relation to space as defined by his stance.

Clearly, space is not created by the adding of one part of a body to another. Neither is it the case that a body is created by a concretisation of specific parts of space. Space and body are in the main two different qualities of the existent, with different metaphysical accents. The artist first creates provisional boundaries for space, which are not those of the human figure but of the block itself. He then makes the figure move in space, first within the same boundaries, and then in relation to the horizon of nature. He defines the boundaries of this space that has been enlarged into a bounded infinity as a variation of the pediment triangle.

The classical artist thus attempts two things, to measure space by man, and man by space, or, in other words, to reduce space to human dimension, and to move man in space to the extent that he can determine it. The block and the pediment play the part of mediations, but both leave a portion of space unformed, or give it only an outside, frame-like boundary. Here one can speak of the finite self-fashioning as expressed in the figure's stance which 'anthropomorphises' the abstract system of co-ordi-

nates. The academic formula of the supporting and relaxed leg, of load and support, have completely obscured the historical uniqueness and complex nature of the classical Greek stance by interpreting it in purely mechanical terms.

The three elements which signify diversity in the figure analyses from the Olympia pediment are extension-flexion, raising-lowering, and rotation-counter-rotation. The supporting leg suggests that it has not been disturbed by an outside force, but is tied to the ground and capable of providing support. The relaxed leg suggests it has been disturbed, and is detached from the ground and thus incapable of providing support. Here, there is a simultaneous and differing effect of a cause, which is shown by different reactions as observed by the artist. The supporting leg is capable of providing support only because it is itself supported by a firm and resistant body. This body can only be the earth. This is what gives it the strength that caused the other leg to bend. The resulting flexion creates an angle, which with the angle of the arm, opened out in the opposite direction, creates also alternating convexities and concavities. These recur in rounded forms at the edge of the drapery, on the opposite side of the figure, where they clearly suggest waves.

In that sense earth is opposed to water. But apart from that interpretation, there is the fact that we have one leg bound and held by the earth and the forces of the earth, and beside it a leg that is about to move, that contains all possible movements, but does not move, that is a merely potential movement that is not followed by an actual movement. It is this mobility, both momentary and permanent that makes the flexed leg incapable of providing support. Thus, load and support within the human body, the statics of its perpendicular forces, are dependent upon forces that transcend the individual body. The classical position of the legs has been interpreted as a reduction of the Egyptian walking position, but one is more justified in deriving the movement of

rotation from the dancing step.

The new stance could be interpreted as a synthesis between two ritual movements, running and dancing. The new synthesis is based on the comparison of complete finitude of stationary point with the infinity of open space. The stance embodies the elements of initial disturbance, resistance, restored balance, potential and actual movement, and an unsupported load floating in space.

The play of the perpendicular forces is also only part of a greater interplay, whether interpreted as disturbance and restoration of balance, or, as freedom and un-freedom. Even though the function of the perpendicular forces is thus restricted, it is of fundamental importance because it humanises conflicting extra-human forces and resolves the conflict between them on a human plane.

Differently from the articulation in archaic art of the stone masses as determined exclusively by the proportions and forms of the human body, classical art conceives of the human body as a complicated play of self-regulating levers, each acting upon others and reacting to them, and action and reaction always balanced in accordance with the principle of the organic muscle. The classical body is a machine constructed after the pattern of the living organism, and muscular action is suggested even where the position of the masses could be accounted for by gravitation alone.

One can thus gain a clearer picture of the function and significance of the axial system. It is not a geometric pattern that determines the work a priori. It serves to illustrate the interplay of the antithetical forces that are grouped around the point of intersection of the co-ordinates. The axial system embodies all these forces, it expresses both the disturbance of the initial state of absolute repose and the effort to restore balance by measuring the deviation from the former and the approximation to the latter, the

interval between potentiality and actuality, between wish and fulfilment. It unifies the diverse forces into a single cause, making the latter visible. This unifying function extends beyond the figure, for it is the axial system that links the figure to the block, the block to the pediment, and the pediment to the architecture, thus it is the nucleus of an integral work of art.

The axial system also performs another function; it provides an over-all frame for the figure and its parts, which links the universal and the concrete, idea and forms. This is the *biune* cause, the polar that Raphael identifies for the mechanical and organic elements, the statics and the dynamics of the human body being used to solve problems which involve far more than the human body, but are the only means that the classical stance indicates by which man, for all his dependence on forces outside of him, can become spontaneous by balancing them against one another, and asserting his freedom as a being that supports itself and restores its own balance.

Some of the forces, such as those which disturb the position of absolute repose and shift the vertical axis to the left, are extra human. Others are human, such as forces of resistance originating in the inertia of the human body, the conscious forces that restore the balance, and the spontaneous forces that break apart the restored balance, implying human activity in the outside world. The non-human forces can be divided into efficient or moving causes, and final causes. The former include the earth forces, the ancient equivalent of gravitation, the forces of personal fate, *daimonion*, and the forces of universal destiny, *ananke*. The final causes assume three forms: *gestus* of the action, Moira, or fate as recognised or desired justice, and living harmonious form.

Thus in speaking of the *biune* cause, it is recognised that the balance in question is not between two different things, but between two forces of

essentially different kinds. This also defines the action represented in the human figure, the action which is potentially started on one side of the figure, where it is directed against both the cause of the original static balance and the disturbance, to be actualised as the restoration of balance, where it must be transferred to the other side. This transfer is affected by an ideal rotation of the space behind the figure's back, as if this space symbolised the shrine in which the consultant of the oracles slept, in order to receive dreams that determined their actions.

The *biune* cause is the key to understanding the classical conception of man, just as cosmic-mystical monism is the key to understanding the Indian, dualism to that of the Egyptian, and triunity to that of the Christian conception. It is the human figure which fully embodies the operation of the *biune* cause that shifted the axial system. The question then is, how did the artist embody the unity between the inner and outer world in matter as such?

When we turn to the sculpture we must say that the statue does not merely translate an idea into a language of the senses. It is also the material embodiment of the idea, and one needs to understand how matter as matter becomes the vehicle of the unity of opposites. This requires a precise material analysis. One can begin by examining the question of perception. Light penetrates into the marble, animates it without dematerialising it. Classical art is bound to marble to such an extent that one could say it would not exist without it. No other art has ever used marble for the same purpose or treated it in the same way as classical art.

From observations on technique Raphael draws a number of inferences about the creative method:

1. The number of tools was deliberately limited. The Greek artist was not guided by ideas of efficiency engineering. His primary aim was not to produce results with a minimum of labour. Rather, he made

the greatest intellectual effort to achieve the best possible results in accordance with the immanent requirements of the given work. Its effectiveness is inherent in its intensity; it is not imposed on it in advance.

2. Individual layers were successively removed from the block, which was explored in depth from all sides. In each of these operations the sculptor never lost sight of the figure as a whole and aimed at a spiritual-physical surface, instead of a natural or technical-physical. As a consequence no part of the form was treated more naturalistically than the whole, and every detail reflected the overall conception, neither the individual form nor the composition is at any stage divorced from the stone medium. Thus both naturalism and abstract naturalism were excluded.

3. The work of carving with the point and the work of polishing with pumice or sand were not treated as independent of each other; contours were not opposed to interior forms. The initial rough planes obtained by the point were worked over with the claw tool before they were evened up and polished by friction. The artist aimed consistently at actualising the natural potential of the medium. Objective apprehension and exploration of the medium was determined by the idea, to the same extent as it made possible the realisation of the idea. The idea being realised not only in the medium but also in the means of visual expression, that is, line, colour and light.

The latter point supports the proposition that it is the essence of classical art to represent the individual idea not so much through the human figure, but as the human figure. Even in the argument with regard to the light and form it is necessary to understand that it is closely related to the conception of an air-filled space. It differs from the Egyptian conception of juxtaposing full and empty areas in the block, and endowing both with equal intensity,

and it also differs from the conception of absolutely empty space in which, or, in front of which things are placed. The void is regarded as mere appearance, matter is known as of two kinds with different qualities, and the qualities of air and stone are linked when each penetrates into the other, and internally when bodies occupy air-filled space, giving it, as it were, a spiritual-material quality, while the air dematerialises the bodies. In this way sculpture is linked to the space outside it, and its distance from the viewer becomes an element of the work and is given form like the other elements. This is why a Greek sculpture seldom looks into the void; it gazes directly or indirectly at the viewer.

We can then say that the classical artist recognises that ideality and reality are opposites, and that he accepts this opposition as an absolute necessity. He does not spiritualise matter nor conceive of it as a metaphysical substance, he does not conceive the process of creation as a gradual descent from ideality to materiality, or, as a gradual ascent from materiality to ideality. He achieves the union of the two without blurring their antithetical character, so that each preserves its own specificity. The two are equally important and they form a union in which materiality has become ideal without ceasing to be material, and ideality has become material without ceasing to be ideal.

Ideality is potential materiality just as materiality is potential ideality. The self-realisation of this unity implies that the potential materiality of the ideal, and the potential ideality of the material have been realised. The two processes lead to a point where materialised ideality and idealised materiality become identical, and this identity is the *Gestalt* of the process, the being of the method. In classical art the objectively given and the subjectively posited coincide without losing their specificity. There is no pantheistic-mystical fusion of the opposites into a sameness, rather each preserves its separate existence, and the two find their unity in man, in the idea

of his consciousness, which is at the same time the surface of his body. The mode of reality embodied in classical art can be called the self-constituting form of material ideality.

Thus the aesthetic feeling expressed in the figure, its mode of reality and its inner composition, disclose that the subject treated is man and his relationship with space and fate in its human and extra-human aspects. The conception of man, space, and fate embodied in it are determined by specific historical conditions, and reflect a specific level of material and spiritual production rather than nature. The type of artistic structure being dealt with here is not based on imitation of the natural human organism, although human forms are used to embody the visual representation.

The biune principle is developed into a dialectical process which results in a single form; within the form the conflict between the two opposites is not eliminated. For this reason the type of structure realised here is not quasi-organic, that is, it is not a system in which a series of causes coincides with a series of ends. Although the type of structure is not patterned after the natural human organism, the conception underlying the work is realised in the human figure, which expresses the ideal of unity between natural and historical man, and between man as empirically given and the Idea of man.

What is the kind of man suggested by the figure? Its physical appearance is largely determined by proportions, for example the unit of measurement is clearly indicated in the head and feet. The minor difference between the dimensions stresses the importance of their relationship for the over-all figuration, *Gestaltbildung*. The fact that the part of the body which is least free and the part which is freest are linked in their inner composition denotes that everything outside the body is related to the body, is made inherent in the body. The unit of measurement and its sub-divisions, one half and one third,

remain effective as a measure throughout the figure, but they are rarely exact, and least of all at the most emphasised places. Everywhere there is slight deviance from the fundamental unit, and as a result the metric structure has a rhythmic quality combining necessity and freedom.

In this structure, next to deviations from the exact unit of measurement, combinations consisting of multiples of the unit and with added halves or thirds play a special part. To overlook the difference between metric structure and rhythm, or to imprison the composition in mathematically exact grid lines, would be to reduce the creative process to a lifeless mechanism.

To the proportions that determine the interrelationships between individual forms and harmonises them with one another, one must add the internal proportions of these forms themselves. No part of the body is overly contracted at one place or overly extended at another, and nowhere is the continuity between two parts broken or in an exaggerated way stressed. The strongly in-drawn hips, for example, which characterise the archaic type of human being is eliminated, and the shoulders are no longer considerably broader than the hips. Bones are emphasised when this is justified by their function, e.g. knees, hips, shoulders, so that the body appears as a solid structure.

Elsewhere the bones are surrounded by flesh in such a way that bones seem to attract the flesh, incite a cleaving, and hold it firmly, and the flesh seems to loosen the bone. The simultaneous effect of tightness and looseness rests no doubt on the treatment of the muscles, which are fully adequate to their function. The part they play is not overstressed and it gives a strong impression of spontaneity.

The mechanical functions involved in the living interplay of the parts of the body are clearly shown, yet they are fully integrated into the whole, precisely

because each part performs many functions, spatial, measuring, static, compositional, which relativise one another, and because the artist's imagination is concentrated on the reality of the form as a whole. We are shown changing tensions and relaxations, that is, there is slight quantitative variation in the unit of energy and volume; because energy no longer serves magical purposes, it is conceived of as the living force of the human body, expressing the interplay between action and reaction.

So, the figure stands within the block whose greatest height, without the head, equals six units and whose width at the hips equals one and a half units, with a drapery or two. Between the shoulders and the hips the torso forms a rectangle within the rectangle of the block. Then the width decreases considerably, and the lower part of the body even seems narrower than it is, because the area occupied by the two seems reduced by being in the shadow. The entire lower body could be inscribed into an angle, parallel to the frontal plane, and with its apex located between the feet. If its sides were extended to the armpits they would abut against the rectangle of the torso. The resultant figure links the centre of the bottom side of the block with the corners of its top side, and consists of a rectangle placed above a triangle.

In classical man sensibility is neither dominated by irrational emotions, nor rationalised by the understanding. It is expressed as a balance between man's physical and spiritual forces. It is love for the world as a whole, not for specific material objects, nor the metaphysical Idea of Ideas. This sensibility is not passive receptivity, for the *sensorium* is faced with a force which prevents man from becoming the product of his environment. This force does not merely react to stimuli, but is spontaneous and capable of initiative. The *sensorium* has as its counterpart a *motorium* which stimulates action as such, rather than action in response to outside stimuli. The balance between *sensorium* and *motorium* is

not brought about directly, but through the mediation of consciousness, which sets limits to both, thus achieving not only external balance but also internal unity.

Sexuality is emphasised to the extent that the sexual organ seems to be situated at the centre of the vertical axis. It is not localised in any other respect and it has become absorbed in the sensual quality that characterises the entire surface of the body. Sexuality is not conceived of as an imperious instinct, but as tempered eroticism, in which the active and passive sexual functions are balanced, and which never falls into the excess of ungratified passions or mystical ecstasy. All particular qualities have been replaced with a state of pure intensity, which is midway between tension and relaxation. Affectivity is always restrained and permeated with sensibility; the latter is the outward manifestation of the former and the former adds warmth to the latter.

Emotion is never murky or irrational, it is clear, conscious, lucid, and it repays these gifts of the intellect by divesting it of its coldness and rigidity, by transforming knowledge into wisdom. This wisdom does not refer to a beyond, a transcendent divine world or to immortality; it remains on the human plane, midway between physics and metaphysics, necessity and freedom, *ananke* and *daimonion*. Man seeks to unify these opposites without appealing to an external or superhuman force, by creating a definite, permanent form, a living artistic reality, in which the inner sense is identical with the external senses, just as the idea is identical with the body and the body with the Idea.

Thinking is a self-knowing being aware. Taken in itself this awareness expresses a mode of being which is outside the chain of causality and the play of forces, because it has carried out the one task that confronted it, to centre the world around man and to link the two together, to represent man as

shaping himself and the world as a living form in the universal scheme of a disturbed state of repose and a restored balance.

Man acts in conformity with his nature if, out of knowing awareness, out of self-knowledge, he discovers the point where spontaneous initiative and free activity become possible. The purpose of the activity is always the same, to restore an order that has been disturbed, to fulfil one's own *daimonion* through the fulfilment of *ananke*. Man is therefore always responsible for his actions. Since man shapes his own destiny he cannot transfer this burden to another, he cannot lose himself in a nirvana, he cannot surrender himself to a mediator, sorcerer or mystagogue, he cannot be absolved from his responsibility by a father confessor.

Classical man could only act in this life, and for him catharsis does not follow the action, but precedes it, or, more accurately is inherent in it. Classical man stands then in an artistic and philosophical conception of space which is centred around him, concentrated in him, and at the same time extends beyond him, defines his conflict as human, a conflict that is not created by man, but that is inherent in him, and that he cannot elude.

In our figure man is related to himself, and he is related to a being transcending him. The former relationship defines his axis, the latter the foundation on which he rests. These two relationships define the viewer's relationship to the figure and the interval between the two. If man were exclusively defined by his awareness of himself, his task of harmonising and unifying his individual qualities into a purely intensive whole would be a mere aesthetic play, a kind of aesthetic self-education, which might be useful socially. If man were exclusively defined by a reality transcending him, if he had no autonomy, no task of shaping himself, he would be without greatness, dignity or beauty.

But, if man lives at the point where two dimensions intersect, one representing the forces that determine him, and the other his own power to determine the force outside him, and if his consciousness can encompass the extra-human forces and confront them with the idea of man who shapes his own destiny, restoration of the disturbed balance can no longer be regarded as aesthetic play, it becomes expressive of man's fate.

In summary, Raphael's analysis leads to a biune principle, which does not manifest itself as such, but by its effects - the opposition between gravity and consciousness, *daimonion* and *ananke*, finitude and formlessness - so that the man represented and the viewer live simultaneously in all dimensions, which meet at a single point. Each of these spatial and spiritual dimensions has its own inner opposite in a form that is both abstract and concrete, potential and actual. These various modes of being as well as the various dimensions remain at first separated, one beside the other, but also in the greatest tension with each other, a tension that is measurable by pure intuition. They remain bound to one another and we see no development, no process of emanation. Just as in the original block all dimensions and directions are both present and absent, so all the modes of being are present and absent at the point where the dimensions and directions intersect. This co-existence is not developed as something objective, but is posited as something subjective, however, in such a way that the positing is immanent in the objective without being able to manifest itself.

After the contrasts between dimensions and modes of being have been rendered concretely, in the medium or in the stance of the figure, they are balanced against one another, so that the opposites are equally stressed. Then the opposites are unified without losing their identity. This process results in a new unity, the *Gestalt*, which is individual form as well as total form. This method of dialectical synthesis is seen in the transformation of marble into an

artistic medium and form, and in the transformation of the block into space and a human figure; in the simultaneous development from inside, axis, and from outside, block boundaries; in the unity of the inner and the outer world, of body and soul; in the linking of various human capacities.

This dialectical part of the method, which is very different from Hegelian dialectics, discloses the following features: 1. It operates in several modes of being simultaneously; 2. all contrasts derive from a single source and converge towards a single goal, and 3. it is a finite act, not an infinite process, which aims at definitive form, at a permanent though dynamic and living reality.

There are two methods, or two stages rather of the one method applied on different planes, and equally valid for two different modes of being. One expresses the relation between potentiality and actuality, without a one-sided or double process of emanation, and the other expresses the movement of the opposites within the real itself. Each is apprehended differently, that is, by a different combination of thinking and perception. There is also a third stage of the method, which is usually referred to as the composition, i.e. the unification of the individual forms into the total form, internally coherent, self-contained and living, only because no form can express it adequately.

Every individual form is developed fully as an image of the whole, but independently of the whole, and conversely the whole is not the sum of the individual forms. The two opposite movements, from the parts to the whole and from the whole to the parts, specify several layers of being and bring them into balance. In this logic of form there are notable discrepancies, which is a sign that the finished work of art preserves the biunity of the principle, and that the principle does not manifest itself as such.

The will to form, to form in accordance with a

logical method, is thus inseparable from the absolute recognition of the existence of a reality that cannot be formed. This invests classical man with his sublimity. Like Ulysses during his visit to Circe, he knows that he is threatened from two sides, the sorceress can change him into a swine, the goddess can give him eternal youth and immortality. But he is equally unwilling to be turned into a beast or made into a god. His blundering search, his struggle against the elements, his humanity are dearer to him than the immortality of the god. Precisely because classical man prefers the consciousness of his own self to the powers of earth and heaven, of the underworld and of Olympus, the method of this consciousness, no matter how much it may aim at absolute permanence, cannot be a repetition of a dogma, the imitation of something ready-made, but must be a self-constituting dialectical development and construction, not merely of a single human body in space, but of a new type of reality.

This reality is neither metaphysical nor empirical, but a true synthesis, not a fusion, of all other realities, which both preserves and transcends the oppositions inherent in each of them. With the creation of such an artistic reality the work of art ceases to be a sign of something else, to refer to something outside of itself. It lays claim to be the sole and total resolution of all contradictions. In attempting to achieve the impossible, such works become timeless. The idea of human perfection is to be achieved by man's own efforts.

In classical sculpture then, the human figure does not play the part of an artificial mediation between matter and spirit, but that of a stage in the process of unifying the two by dematerialising the medium and materialising the spiritual expression. For this reason the material characteristics of the human figure do not imitate the natural surface qualities of living human beings. We have three elements, the natural medium, marble, the figure which is both material and nonmaterial, and the expression or

spiritual material of the artistic idea, that is essentially the idea of man, as finite body, mortal and self-creating. It needs again to be stressed that all these elements are of equal importance, and that they interpenetrate in such a way that the specific character of each is altered, though none loses its individual identity.

This interpenetration of equally important but distinct elements is unique, because the object represented whose natural qualities have been transformed, namely the sculpted figure, serves as a vehicle for the other two elements. In so far as it is a synthesis of these two elements it is not at a higher level; it merely represents the qualitatively new mode of being to which all these elements have attained, they have now become a living, structured, and thus limited, though not finite unity.

This classical dialectics must not be confused with Hegelian dialectics, which is not Greek but Christian, and which is conceived as an infinite process, each synthesis being followed by its antithesis, whereas classical dialectics consists precisely in this, that the unification of opposites is a simple and finite process completed with the creation of form. In Greek art, geometric form and organic form are equally stressed and modifying the other without losing its specificity.

The two form an indissoluble union, which does not express a metaphysical principle, but a human action. The artist is aware of the disparity between the human spirit and the cosmic soul, he suggests that the two can be harmonised in the human figure, which is thus conceived of as an image and likeness of the ordered cosmos. This synthesis of spirituality and sensuality, of essence and appearance, means that a form can be both perceived by the senses and grasped by the mind, and this form is both self-constituting process and structured reality. It is a form identical with content, because the form absorbs the content and posits itself as content.

Traditional philosophy does not supply a term to denote the reality that is suggested by such an analysis of the content and method of classical art, and Raphael coins the notion of a Real-Idealism, a term that he suggests has the merit of indicating that classical man was not released ready-made from the natural medium of marble, but only by transforming its properties in a creative act.

Notes

1. Cited in Max Raphael, *The Demands of Art*, trans. by N. Guterman (London: Routledge & Kegan Paul, 1968), p. 225.
2. The full account by Marx can be found in the Marx-Engels collected works (MEW, i.e. *Marx-Engels Werke*, Dietz Verlag, Berlin), in the concluding pages of *Zur Kritik der politischen Ökonomie*, 1857, MEW, vol. 13, p. 640 ff.; also Max Raphael, *Arbeiter, Kunst und Künstler* (Dresden: Verlag der Kunst, 1973), especially 'Prolegomena zu einer marxistischen Kunsttheorie', pp. 256-363; and Max Raphael, *Proudhon, Marx, Picasso* (Paris: Editions-Excelsior, 1933).
3. For a succinct analysis of the failure of Marx see 'The Struggle to Understand Art', in Max Raphael *The Demands of Art*, pp.186-87: 'And there are good reasons for this. If we apply to the thesis that art is an ideological superstructure, its own presupposition, i.e. that of historical materialism, we find that historical materialism itself is only an ideological superstructure of a specific economic order - the capitalistic order in which all productive forces are concentrated in the economic sector. A transitional epoch always implies uncertainty: Marx's struggle to understand his own epoch testifies to this. In such a period two attitudes are possible. One is to take advantage of the emergent forces of the new order with a view to undermining it, to affirm it in order to drive it beyond itself: this is the active, militant, revolutionary attitude. The other clings to the past, is retrospective and romantic, bewails or acknowledges the decline, asserts that the will to live is gone - in short it is the passive attitude. Where

economic, social, and political questions were at stake, Marx took the first attitude; in questions of art he took neither. He reflected the actual changes of his time, which is to say he made economics the foundation of thought which it had become. He did not lose sight of the further problem, but as he could not see the solution, he left it unsolved. Had he been able to show that an active attitude towards art also exists, he would have brought the understanding of art up to the level of his revolutionary position.'

4. This can be found in Max Raphael, *The Demands of Art*, pp. 183-204.
5. The first book-length publication of Raphael was *Von Monet zu Picasso* (Munich: Delphin Verlag, 1913). The other principal publications during his lifetime were *Idee und Gestalt* (Munich: Delphin-Verlag, 1921); *Der dorische Tempel* (Augsburg: Filser Verlag, 1930); *Proudhon, Marx, Picasso* (Paris: Editions-Excelsior, 1933); *Zur Erkenntnistheorie der konkreten Dialektik* (Paris: Editions Excelsior 1934); *Prehistoric Cave Paintings* (New York: Bollingen Series, 1945).
I date his later work as running from 1933-51. His earliest article publication dates from 1910.
6. Max Raphael, *The Demands of Art*, p. 191.
7. The principal contrast with earlier and late work, turns on the shift from Raphael's earliest theory of the creative drive as developed in *Von Monet zu Picasso* (1913), and his development of a dialectical epistemology in *Zur Erkenntnistheorie der konkreten Dialektik*, published in Paris in 1934.
8. The most readily available text for this is, Max Raphael, *Tempel, Kirchen und Figuren*, ed. by H.J. Heinrichs (Frankfurt-am-Main: Suhrkamp, 1989). See pp. 293-399, 'Der klassische Mensch, dargestellt am Peirithoos im Westgiebel des Zeustempels von Olympia'. It is this text from which my summary is drawn.
9. The phrase 'mother of all academies' occurs in the foreword to the text 'Der klassische Mensch dargestellt am Peirithoos im Westgiebel des Zeustempels von Olympia', in the following context: 'Das Zentrum der echten klassischen Kunst ist Dialektik. Es ist eine der erstaunlichsten Ironien der Geistesgeschichte, ein besonders ungeheurliches Umschlagen ins

Gegenteil, das gerade die dialektischste Kunst zur dogmatischsten, zur Mutter aller Akademien geworden ist'. See Max Raphael, *Tempel, Kirchen und Figuren*, p. 298.

10. For this argument see Max Raphael, *Der dorische Tempel*.

Biography

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