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Design, Demos, Dialectics: Max Raphael's Theory of Doric Architecture

Patrick Healy

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The main focus of this paper is to examine the analysis offered of the Temple of Zeus at Olympia by Max Raphael in his study dedicated to the remains of the temple. The temple of Zeus at Olympia is often cited as the canonical example of Doric temple architecture and Raphael examines how a particular design can have such far ranging influence, to which end he elucidates the relationship of design to the activity of a participatory and democratic process specific to the Greek polis. By bringing to bear a highly dialectical analysis of the various forces at play in both construction and the elaboration of the temple, Raphael advances a brilliant interpretation which takes account of the social, spiritual and material dimensions at play and dissolves older academic understandings of the achievement of 'classical art'.

#Max Raphael

#Demos

#Dialectics

#Doric

#Design Social

Design, demos & dialectics

This paper will look at a discussion on design, “demos” and dialectics in a remarkable series of studies conducted by the German theorist and philosopher Max Raphael, whose writing about the Doric temple will be its focus. More specifically it will examine the arguments on the Temple of Zeus in Olympia to which his study is largely dedicated. As this work is not available in English, nor his earlier published work on the Doric temple from 1930, I take the liberty to give extensive paraphrases of the German original in English.¹ I will also show that the analysis provided by Raphael allows one to understand what is meant by speaking of a dialectical method for the analysis of the design achievements of the Doric, and the role of the “demos” – the term in Greek refers to the people – in their collective and participatory democracy with regard to the religious, spiritual and social meaning of these temples. This paper also expands on my previous notices of Raphael’s work in my *Beauty and the Sublime*, (Healy 2006, 63-71) and an article for the inaugural number of *Footprint*, “Max Raphael, Dialectics and Greek Art,” (Healy 2007, 57-77).

In the first part of this paper I will briefly indicate the reception of Raphael, especially in English. In the second part I will outline in some detail his analysis and method of work on the Doric Temple, and in the concluding section relate the development of the social and dialectical significance of the architecture and Raphael’s distinction of his use of dialectics from that of Hegel.

The interest and appreciation of Raphael’s work in English can be traced from the earliest response in the *Marxist Quarterly* in New York 1937 to reviews of his two publications: *Prehistoric Cave Painting* (1945), and *Prehistoric Pottery and Civilization in Egypt* (1947). Meyer Schapiro prepared the article in the *Marxist Quarterly* from Raphael’s *Zur Erkenntnistheorie der*

konkreten Dialektik, which was published in 1934, and entitled “A Marxist Critique of Thomism”.²

The renewal of interest in Raphael was further stimulated by a publication of the volume *The Demands of Art* in 1968, in the Bollingen Foundation series (a volume made up from the then unpublished German manuscripts “Wie ein Kunstwerk gesehen sein will” and “Empirische Kunstwissenschaft”; translated by Norbert Guterman). In the Introduction, Herbert Read suggested that the little known author had made “the most important contribution in our time to the philosophy of art.” (Read 1968, xv).³

In the following year, 1969, John Berger endorsed Read’s judgement and bestowed high praise on Raphael’s work. It was Berger’s advocacy, in its evaluation, for example, of Frederick Antal and Max Raphael, which influenced the direct engagement with these authors—in the case of Antal, via Anthony Blunt at the Courtauld, and in the case of Raphael by the art theorist Jonathan Tagg. Tagg was in direct contact with the literary executor of Raphael, Claude Schaefer, in Paris. Tagg added considerably to the awareness of the range and extent of Raphael’s work.⁴

In the 1970’s and 80’s one can speak at the same time of a parallel revival of interest in Raphael’s work in Germany that culminated in the Suhrkamp edition of eleven volumes of his writings in 1989, largely on the initiative of Hans-Jürgen Heinrichs. Raphael’s work started to re-appear in publication in, then, East Germany thanks to Norbert Schneider and Jutta Held; and Tanja Frank wrote an academic study of Raphael in relation to the Marxist theory of art.⁵

Elizabeth Chaplin published *Sociology and Visual Representation* in 1994, and in the first part of the study (Chaplin 1994, 19-112) there is an extensive discussion of Raphael that is largely influenced by

the research of Tagg. The next major contribution in English was an essay in the publication edited by Andrew Hemingway, *Marxism and the History of Art: From William Morris to the New Left* where the author, Stanley Mitchell, focused on the essay in *Demands of Art*, which headed the volume on Cézanne. The earliest independent book publication of Raphael, *Von Monet zu Picasso*, has been subject to a recent extensive re-evaluation by Françoise Delahaye in *Études Germaniques*, in 2008, following her doctoral work on Raphael, which she defended in 2008 at the Sorbonne (Delahaye 2008, 7-80).⁶

In a substantial book-length study of Picasso and Marx, Professor Sarah Wilson of the Courtauld London again returned to look at Raphael's writings on Picasso and the sociology of art in detail, and re-considered the implications of his critical work, such as found in an essay on *Guernica* in the *Demands of Art*, which was such an inspiration to John Berger. Professor Wilson provides a helpful account of the teaching work of Raphael in Berlin, where the main text on "Classical Man in Greek Art" was prepared for delivery to workers.⁷

I would like now to turn to Raphael's extended treatment of the Temple of Zeus at Olympia (Fig. 1). For Raphael, the understanding of the Doric temple and the classical conception of the human situation was a matter of fascination to historians, not only for the impact such creations exerted on Rome and India, but on all subsequent revivals of antiquity. He hoped that the understanding of such achievements would help in efforts to transform the world. Understanding the making of this art would allow one to clarify a few facts that had been obscured by "the evolutionary prejudice prevalent in the historical sciences".⁸

The task Raphael advances is to grasp the creative method and not simply describe the product of the imagination of classical man. In other words, the task is to understand the transforming actions of creation, which needs to not only contemplate the

"what", but also reflect on and re-experience the "how". To that end, one must gain insight into the forces which, under the name of Greek art, or the classical, have so profoundly influenced history for reasons that, Raphael argues, remains largely unknown. He would also, *inter alia*, address the question of how the design of the Doric Temple could be so paradigmatic over such a long period of time when social and other conditions changed from which it emerged.⁹

Raphael opts to examine in detail a small number of works in order to clarify the method by which they were created and their historical background. One dimension of the historical background suggests to him that the tradition, the ultimate Neolithic foundation, and its impact on Egypt was a hostile one, against which "nascent classical art had to assert itself." Raphael sets himself the task of solving the problem of the classical achievement, and thus provides a weapon against the irrationalism of the phenomenologists, existential philosophers, no less than against, what he calls the pseudo-classical works from Raphael of Urbino to Ingres, and contemporary abstract artists making the resounding claim that: "The heart of genuine classical art is dialectics, and it is one of the deepest ironies of history that the most dialectical of art should have come to be regarded as the most dogmatic, as the mother of the academic".¹⁰ For Raphael, dialectical art cannot be imitated. It is the method by which it is created that deserves to be studied, not because it gives the direction to some new, third, or fourth, or fifth humanism, "but to a humanity that will for the first time in history be truly free."

Raphael then provides an analysis of the central figure in the west pediment of the temple of Zeus at Olympia, and makes two observations that will guide understanding; the figure, like the pediment itself, is intimately related to the architecture, and within the pediment it is related to other figures "as part of a community and a formal whole." Thus,

one cannot treat the figure as a body confined to itself, as an isolated work, and thus self-contained and primarily autonomous. At the simplest level and on first sight the pediment is abounded area of definite size, structure, and dynamic tendency. It is a low triangle with very acute angles at the base, and thus strongly inclined sides. The varying height of this area partly determines the choice and arrangement of the objects represented in it; its shallow depth determines the type of modelling employed. In this case it is the use of high relief for the sculpture. The varying height of the pediments, which increases as one moves from the sides to the centre, also imposes a distinction between primary and secondary figures, a gradation of their importance in terms of the action indicated, and even a specific manner of representing the action.

Further, one can observe that the strongly accentuated centre imposes a symmetrical arrangement, and thus precludes a continuous development from a beginning to an end. The slanting sides of the triangle suggests a rising movement if they are seen from both ends, and of a falling movement if seen from the apex, and the dimension of width is broken up into two opposed directions which raises the problem of their unity. That means the very form of the pediment suggests to the artist—also in the dimension of height—whether each of his figures should suggest a rising or falling movement, and how each should embody movement in its own way.

In the dimension of depth, the human figure is situated between the open space in the 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 the two different boundaries. In the case under observation, the central figure of the west pediment, the outstretched arm and the head of the figure suggest the form of a half pediment. Thus, the form of the pediment has been introduced into the human figure and conversely, the

asymmetry of this figure has been carried into the symmetrical form of the pediment.

The height of the pedimental triangle at mid-point performs two functions; it co-ordinates all symmetrically located elements, and it introduces a paradoxical asymmetry at the point of convergence. Thus one can speak of a function of centring and a function of breaking up. There is an emotional effect in this contrast, which is made more intense by the fact that while the pediment rests securely on the entablature, the tallest and most important central figure in the pediment is not supported by a column, but stands above a void, which opens the dimension of non-being. In the east pediment, for example, Zeus is also placed above a similar void. Raphael draws from this the interpretation that the architecture discloses the dimension of non-being in the human figure; the human figure discloses the fundamental conflicting character of being in the architecture.

The triangular form of the pediment does not determine the form of the human figures and groups directly, but indirectly, to the extent by which it is determined by the architectural whole of which it is a part. The geometric triangle also occurs in the whole as a form, which 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 and they mark the beginning of a triangle that is completed only ideally in the cella.

In the dimension of height, the triangle is suggested by the reduction of the diameter in the upper part of the columns and by the imaginary lines connecting the outer points of the base of a pair of columns with the centre of the triglyph above them. The significance of this ideal triangle for the construction and proportion of the whole façade was argued for in Raphael's 1930 publication, *Der dorische Tempel*. Raphael went to Paestum, a reprise

of the journey made by Winckelmann in the 1750's, and made on site measurements, which indicated that the ideal triangle touches the lower corner of the abacus in the two central columns, a point that is crucial for understanding the static play of forces. 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. The real pedimental triangle that crowns the temple façade is, therefore, the combination of the ideal triangles in the dimension of depth and height, which are closely related to the forms of space achieved, the perpendicular load and support, and the proportions.

There is another relation between the triangular pediment and the rectangular peristyle, which if not directly perceivable is rationally recognisable and felt in its effects. As mentioned, the two slanting lines of the pediment suggest two movements—one ascending, and one descending from corners to centre, from centre to corners. This is matched in the peristyle by the fact that spacing between columns are greater at the centre than the sides and this leads to a structural paradox, that the greatest height and, hence, heaviest part of the pediment is above the widest intercolumniation, where it receives its weakest support.

Raphael's contention is that the triangle that begins in the peristyle is completed in the pediment, and yet the pediment remains a part of not only of the actual front, but also of the ideal triangle whose diagonals we obtain by extending the sides of pedimental triangle. Thus, the actual triangle has become part of an encompassing ideal space that is not embodied in a material form, just as the space surrounding the structure below the pediment remains invisible. What can be derived from this is that the same basic attitude toward infinite space is expressed in the dimension of

both depth and height. The intention is to create a physical limitation, to express only a part of the whole, but also to express, at the same time, the whole in the part.

What is further argued is that, even in such a mental experiment, the upward movement of the column is counteracted by an ideal pressure originating outside the temple, at a level far above that of the entablature. Raphael, it is clear, uses this discussion to advance the strong thesis that one must reject the static conception of the Greek temple as a plastic, sculptural, body without spatial dynamism, or to see it merely as the solution to purely mechanical problems. In his rich array of arguments he wants to demonstrate how an artistic expression of broader, universal ideas takes place. So it is that the pediment as analysed must be looked upon as mediating between two forces, must be looked on not merely as a static force, but, as a field of opposing forces that has become form.

The central figure in the pediment continues the rising movement from below, but starts from a void. Therefore, it is not the continuation of the column. At the same time this figure, whose head is close to the apex of the pediment, is more exposed to the ideal pressure from above than to the force rising from below. For Raphael, the Greek temple embodies the dialectical interaction of antithetical forces of various kinds—spatial, physical, and intellectual—and in its architecture these forces are adequately embodied in a finite, enduring, and clearly articulated structural body, which is harmonious. When one understands such multiple forces, especially in respect to their role in shaping space, it is, as he argued in *Der Dorische Temple*, possible to recognise the meaning of the whole. What Raphael will discover through his analysis, is the fundamental principles which guide the design and making of the temple.

Staying with the pediment, however, the element to be most emphatically grasped is the element of

depth, the small intervals of space between the open space in front, and the pediment wall in the back. One sees the same principles for the sculptor and the architect at work—for the architect in the treatment of the space between stereobate and the cella wall, where above the stereobate, between the steps and the corona, the air-filled space opens up, and is differentiated from the surrounding atmosphere by the overall character of the structure.

With regard to atmosphere, we see on the stylobate plinths a space filled with bodies and air, and is rich in contrasts between light and dark. The alternations between the full and the empty, between light and dark, and between warmth and coldness over the whole width of the front are knit together by the modelling plane, the imaginary plane parallel to the front and back plane, which passes through the row of columns. This static modelling plane is supplemented by a dynamic factor.

Standing directly in front of the middle axis of the temple we see the two central columns almost frontally, the next two at an angle, and the two corner columns at a more acute angle. The columns never stand exactly in the axes of the plinths. The lights on the columns are distributed asymmetrically. A great variety of brilliance and degrees of light is obtained, and lights and shadows of varying intensity play on the surfaces on all sides. Colour was also applied to hair treatment, eyes, lips, shoes, and weapons, all of which were often painted in bright colours or gilded. Colour served primarily to articulate levels of depth and to stress the contrast between static surfaces and vibrations of light, with areas that also vibrated in them.

Heteronomous movement was opposed to autonomous movement. In the pediment, light and forms are inseparable, and even though light remains dependent on the curved surfaces, the

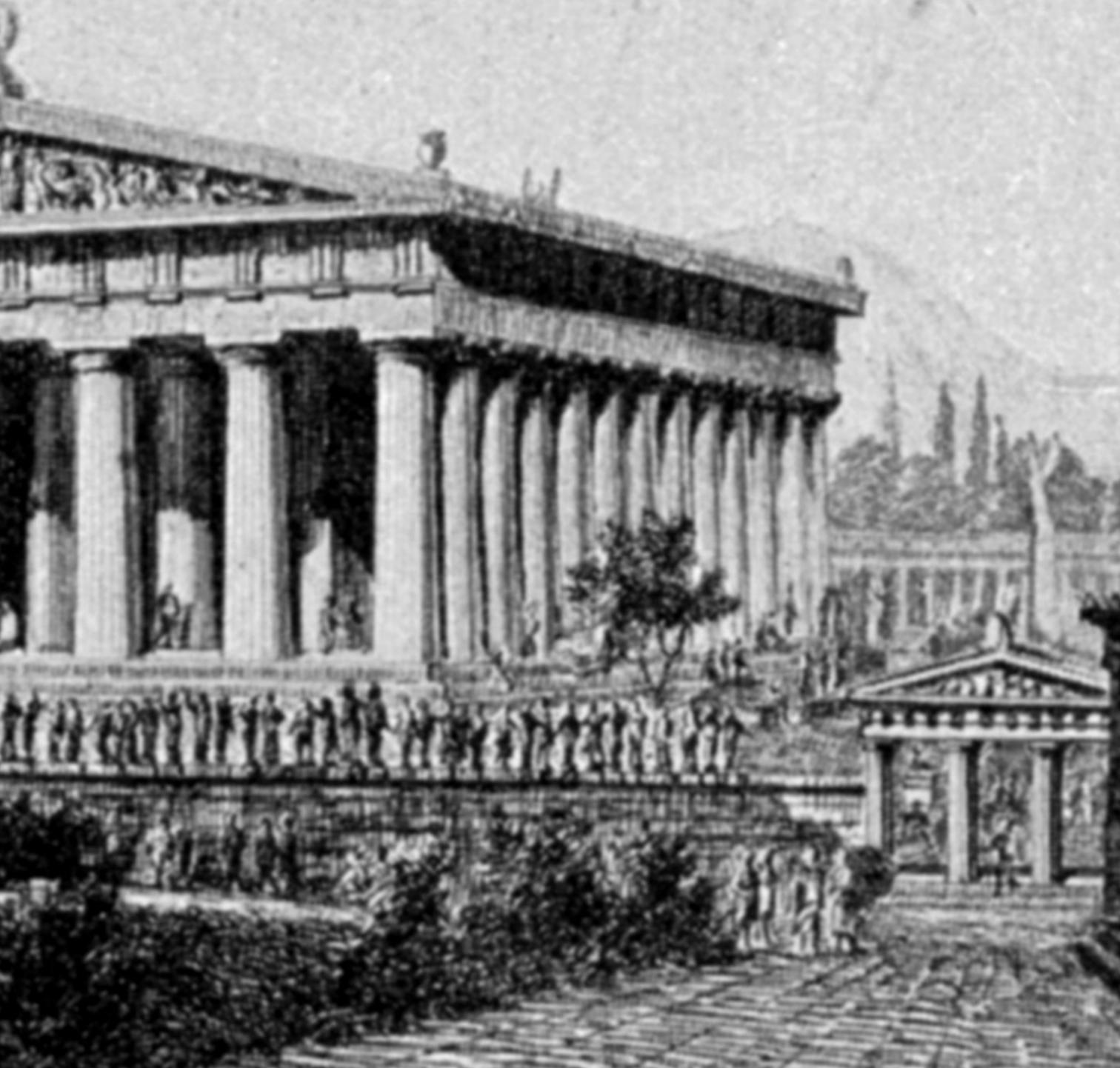
same surfaces are dependent on light. Light and shadow determine the life and boundaries of each individual form, as well as the form of the whole. In this process of interaction, light retains a certain priority over form, although both tend to assume equal importance and merge, as they are more integrated and differentiated than in earlier sculpture. Raphael suggests the role of light in Archaic art (circa 600 BCE) shows that the contact of light and surface is tangential; with light gliding over the surface and always dependent on the inclination of the surface. For the pediment he sees the close union between the two, as reflected in the detailed modelling.

The Greek architect's conception thus starts from an ideal structure closed on all sides which is transformed into the actual artistic structure by opening the ideal wall to admit air and light, so that an air-filled space is placed in front of the space encompassed by the building and secondly the opening of the part behind the air filled space at several points to create an alternation of masses and voids and a vibration of the void around an axial plane. A diagonal is also indicated, which runs from the corners of the steps, through the corner columns, and cuts across all of the parallel planes on both sides to the centre. Thus, this leaves one solid wall that checks the play of masses and light, only to open up behind the inner space. The same principle of alternating air spaces, portions of the wall, and diagonal intersections is applied in the treatment of the pediment.

Here Raphael begins to identify the guiding principles at work in the design. The discussion does not attempt to divide the work of the architecture and sculpture into different "aesthetic" domains: after all, the figure in the pediment is not merely a piece of sculpture added to the architecture as an ornament, nor is the column merely a mechanical support. The column was created out of the need to break up the ideal

Figure 1 (this page): Restored view of the Temple of Zeus at Olympia, Greece. Source: Wilhelm Lübke, Max Semrau: Grundriß der Kunstgeschichte. Paul Neff Verlag, Esslingen, 14th edition 1908. Source: *Wikimedia Commons*.





wall, and to express the contrast between the full and the void as a stage in the process of opening depth.

The operation of centripetal and centrifugal forces is seen more clearly in the cross section and elevation if one imagines that the opened wall has been rotated around its axis to produce a cylinder. This accounts for the flutings, where one can observe that the outer surface of the cylinder is drawn inwards in relatively wide grooves and sharply pushed outwards in narrow ridges.

The original surface of the cylinder is broken up into many actual surfaces of contrasting curvature and one imaginary surface, parallel to the original curvature formed by the ridges. Ridges and grooves run along the entire column in unbroken lines, which are straight. These rigid, geometric lines constitute the outer aspect of the mechanical forces that are active between centre and periphery, as it were. They enable us to think of the column as a complex of forces that are tied visibly at the neck in order then to open of their own accord, and to exfoliate themselves as a kind of excess of energy.

The form of the echinus is a brief reversal of the form of the shaft, and the Greek column, Raphael remarks, "is not compelled to support but does so 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.

As the column was developed from the ideal wall, similarly 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 within the boundaries of the block in the three dimensional system of co-ordinates that

is shifted in several directions. In delineating the distinction within the design development, Raphael adds that the starting points are different—the architect starts from the "spurious infinity" of physical space, which transforms into a finite spatial body and contains the true infinite, whereas the sculptor starts from the finiteness of the human body and tries to express in it the infinity of the idea as 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. The different arts of making use one and the same method.

In this account, the column is first and foremost an architectonic function and form, and serves primarily to give form to space and embody the play of forces. Only after these forces have achieved formal existence is the human proportion added. Conversely, in the human body the forces of load and support are secondary, as it is subordinated to forces that are both physically and spiritually greater than the perpendicular forces because they come from the earth and from consciousness. It is in the development of the Doric that we see these different elements linked, because they are subjected to the same artistic principle.

According to this principle, 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 harmonised and made to coincide through the mediation of the human body which, once thinking and being have been conceived of 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 both.

With this interpretation of the epistemological problem, Raphael demonstrates that mechanism and organism cease to be an absolute antithesis, and within certain limits mechanisms can be treated artistically in analogy to the organism,

just as the organism, without becoming a machine, can be treated artistically in analogy to mechanical forces. It is this precise interplay that was developed by Raphael in his earliest, full development of a theory of creative activity in his first full-length book publication, *Von Monet zu Picasso*.

In this book, Raphael spells out the consequences of this principle at work for architecture, noting immediately that firstly the entablature is placed like a continuous horizontal band on the individual vertical columns, and since no column is directly connected with those next to it, it is the whole row of columns that supports the entablature. Secondly, the round echinus and the square abacus are fitted to each other as closely as possible, which can be contrasted, to the tall blocks on the top of Egyptian columns. Thirdly, each of the two elements influences the form and content of the other; the weight of the entablature is expressed 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 standing or flowing downward, and is stressed by the guttae. The presence of a homogeneous chain of supporting forms, the mediating 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 in any other architectural order.

However, the treatment of such forces varies according to whether they come into contact with the full masses or the void, and the variations represent the original opposition between the full and the void, solid and void, and how further variations can be shown to occur in the treatment of these opposites. For example, the solid is rendered in the squat form of the echinus or in the abacus, which does not yield to pressure and embodies the pure zero point. The void is rendered in the narrow dividing line between the echinus

and the abacus, or in the shadow that envelops the entire capital. These architectural differences are of the greatest importance because the viewer's line of vision varies with them, and indeed the type of interpenetration between solid and void, and the dramatic or lyrical character of the temple depends on the very contact. Viewing the exact position between the top of the column and shaft, and the lower part of the entablature depends on each individual case, and on the solution given to the conflict between load and support. This is intrinsic to the design process, the solution to be found, and warns one against a schematic interpretation of the play of perpendicular forces in sculpture.

Raphael stresses, after a detailed account on the sculptural groups for both the East and West pediment, that the method of representing the action was determined by the fact that the pediment is divided into symmetrical halves. The principle of axial differentiation is asserted not only in the central figure, but also in the two-figure, and even in the three-figure groups. The artist gave neither priority to space nor time, since statics and dynamics are developed simultaneously, and the interplay between the two characterises the composition as a whole.

Self-abolishing, antithetical movements and symmetries within an over-all symmetry characterises the individual figures. Because static and dynamic elements are unified, the action does not unfold in the form of a narrative, nor in simultaneous episodes. Instead, there are a limited number of groups each of which portray a specific moment of the action and suggest the moments that came before and after.

The groups are arranged so that the action develops from centre to corners, which is the artistic action; whereas the real, referred-to action, develops from the corners to the centre. Thus, artistic time abolishes real time, and yet, the tension between the two is preserved. This shows

why the asymmetries within the over-all symmetrical order are so important, for it is only by means of asymmetry and contrapposto that movement in time can be expressed in static terms. This must be artistically justified in respect to time, stages of development, or intensity, otherwise they degenerate, become mechanical, as is often the case in Renaissance art. Failure to recognise the dialectical interplay of time and space exemplified in the sculptural work inevitably leads to the pseudo-classical contrapposto and the academic "organ-pipe" arrangement.

Real connection in the pediment and among the figures is effected by the contrapposto, which is the 'asymmetrical symmetry' within each half of the pediment, and by the air and the atmosphere outside and between bodies. The architectural features of the temple match all of this. The entablature is not supported individually by each of the columns, but by all of them together, although each seems developed for its own sake. The columns alternate with the air-filled intercolumniation, which sets off the columns by flanking them with differently lighted areas. Thus contrasting elements are not linked by cross-beams, as halved piers and intermediate spaces are linked in the Christian church, but by alternations of bodies and air. The architecture of the temple and the composition of the pediment figures, Raphael concludes, express one and the same thing.

Each column or figure that enters into relationship with other columns or figures is characterised first, in its high degree of elaboration—a value of its own defined by the fact that the form of the column has significance that goes beyond its function or expression. Secondly, by self-containment, independence, and self assurance, it suggests nobility, self reliance, and a free and self-confident individual who does not seek to dominate others and refuses to submit to others,

and yet they change into their opposite and become part of a whole without resentment, without losing their individuality. This perfect balance between community as an independent entity, and existence as part of a community, expresses both law and freedom.

The individual elements are linked together as much by these subtle similarities as by contrasts in the fullest sense of the word. If it be contrast between load and support, between solid and void, the concave and convex, we are in any case made to perceive both the actual polarity and the actual interlocking, as well as the imaginary principle which is the source of the oppositions. The Greeks did not know the direct transition from similar to similar that bridges the opposites and that which is embodied in the arch; they knew only the conflict of opposites that were originally united and strive to achieve definite unity.

Raphael goes on to assert that the relation obtaining between the whole and the parts is not one of direct dependence; the parts do not directly determine the whole, nor does the whole directly determine the parts. The absence of dependence and directness is made possible not by the presence of a hierarchy of mediations, but by the operation of a formal, mathematical principle which governs the geometric shape and the proportions both of the whole and of the parts, so that their harmony is achieved indirectly, and each preserves an appearance of freedom.

The principle here is not a transcendent power. Its mathematical character shows that it was conceived as an intermediate link between the Idea and the Phenomenon. It participated in the figures and in the thinking, and although logical in itself, it was possible to arrive at it by purely rational dialectic means. The order to which the conflicting forces was to aspire was an order of being, which Raphael contends, accounts for the

preference given in the best period to the Golden Section, as the manifest form giving proportion.

The whole was always conceived of as an articulated whole, which was not allowed to infringe on the independence and freedom of the parts, no more than the part was allowed to break up the whole. The proportions that governed the parts were adjusted to the proportions governing the whole, as elements of the latter. The absolute dimensions of the elements determined the proportions, and from the whole a series of operations derived a unit of measurements, and the unit of measurement led back to the whole by a series of operations in reverse.

The whole is not defined by its sociological function; as a sociological entity its religious character distinguishes it. The Christian church is first a symbol of the Redeemer, since the cross is the principle that governs the spatial arrangements. Secondly, it is the meeting place of the faithful whose God can only be worshipped spiritually, that is as a symbol of the community. The Doric temple is not in any sense a meeting place of the faithful; it was not the house or even the symbol of the divinity, but merely the place where the divine image was kept.

When Homer portrays Odysseus as the man who restored state order, when Aeschylus settles the tragic conflict of a family by the institution of the Aeropagus, when Plato says that the purpose of the State is to bridge the gap between Appearance and Idea, the inevitable implication is that the social institutions have a religious significance, not because their primary purpose is religious, but because they are creations of community. The same is true of the temple, because in Greek society it is the *zoon politikon* that gives religious consecration to the temple not the spiritual authority of the Church, as was the case in Western Europe throughout the Middle Ages.

The Doric temple does not express a universal idea; it is a specifically Greek product that expresses the polis, the Greek city-state. The city-state could not internally expand the only form in which its economic ambitions could be realised was as an alliance of several city-states, which in the end destroyed them. Similarly, the community of elements realised in the Doric temple cannot be expanded. The temple is a finite whole incapable of any metaphysical approximation to the infinite.

In one essential respect, Raphael maintains, the temple, or, the pediment sculpture, differs from the polis. In the individual city-state as well as in the relation of the city-states, the centrifugal forces, agriculture, aristocracy, Sparta, were stronger than the centripetal, trade, democracy, Athens. In the work of art the centripetal forces are preponderant. The attraction of the stressed middle axis, the *Chthonian* energies pressing on the corners, the atmosphere, the *contrapposto*. The work of art was not an imitation of reality—Raphael rejects so-called classical mimesis theory—or a merely imagined idea, a product of phantasmata. It was rather the Idea conceived as unity of the actual and the possible, and it expressed the unity between the controlled and the uncontrolled sectors of the world. In the reality of the work the artist embodied his vision of the unity.

A remarkable feature of Raphael's analysis is his notion of the constitutive seeing of the viewer, and of us who are critically engaged with understanding his dialectical exposition. Thus he can speak of the observer who views the surface of the stone and what he initially discovers, guided by intuition, namely, that the light and air coming from the surrounding physical world penetrates into the medium and makes it alive.

The two separate worlds meet in the surface, the outer and inner world interpenetrate and become united in it, that is to say the surface is dematerialized, it is spiritualized. Yet the ma-

teriality is not destroyed. Two apparent opposites find their unity, and the bearer of this unity is not some spiritual entity, but the medium itself. In the surface of the transformed stone inner life has acquired a physical quality, and the physical surroundings a spiritual quality. The medium is not sublimated into a non-material principle, rather, it acquires a more intense materiality. We are shown materiality pure, and simple.

Transient matter is made eternal in the stone medium, and the spirit that animates it reaches to the surface of the body. The environment is not only thought of as air and light, but as a void that possesses full material and physical reality. The embodiment of unity is understood via the elements and the method. Thinking of marble, what we perceive is a mostly homogeneous and monotonous whitish colour and vibrating light. These visual sensations stimulate the sense of touch, thus one can visualise the tactile qualities of the marble. Raphael, in the theoretical part of *Von Monet zu Picasso*, developed this theory of tactile-seeing, of the visual-haptic. Here he draws a distinction with Egyptian sculpture, where the visual and tactile are contrasted with what is taken as primary qualities of the medium—heaviness, hardness, and permanence.

Classical art is bound to marble to such an extent that one could almost say that without marble it would not exist. As an artistic medium it is halfway between poros and granite. In the purest variety of Parian marble, for example, the average size of the crystals is 1–1.5 mm (sometimes 2–3 mm) Because of its coarser and firmer crystalline structure, this marble is more transparent than many other varieties, and light penetrates it from and for a greater distance. In its natural state light penetrates it and it is structured.

The physical and spiritual worlds are not merely juxtaposed, but matter is spiritualised to the same extent as spirit is materialised. The interpenetration of form and light makes possible a synthesis between outer and inner worlds, between body and soul. Neither is reduced to sameness nor conceived as congruent, the two are embodied in the work; one as air and light-filled space, the other as intense human expression. In the unity of content and visual means of expression there is the completion of the constitution of the artistic unity. Classical art ultimately works with bodies and forms. The classical artist shifts his system of coordinates in such a way that the deviation remains measurable. In sculpture for example, the notion of the structural block is transformed into artistic space. The old square/cross section of the block has been replaced by a rectangular one, thus freeing the human figure from its subjection to the block. Space is no longer seen as abstract opposition between full/empty, being/non-being, rather it is expressed out of the human figure with its proportions and space and path making activities.

It is the essence of classical art to represent the individual idea not so much in and through the human figure, but as the human figure. The human figure does not play the part of an artificial mediation between matter and spirit, but, is rather a stage in the process of unifying the two by dematerialising the medium and by materialising the spiritual expression. Unlike Hegelian dialectics, the Greek consists in the unity of opposites in a simple and finite process, complete with the creation of form, from the natural medium, the figure that is both spiritual and material, and the expression in the spiritual/material in the artistic idea.

Notes

1. All Max Raphael Citations from <http://maxraphael.org/about/bibliography>. For fuller bibliographical references see the bibliography at *maxraphael.org* prepared by Mr. Jules Schoonman, and some of the biographical material carried currently at that site.
2. See: pages 285 – 293 in Meyer Schapiro work.
3. *The volume The Demand of Art*, published in the Bollingen series in 1968, remains, along with the volume *Proudhon, Marx, Picasso*, Raphael's best-known publications in English. Professor Robert Cohen of Boston was instrumental in helping arrange publication. The volume contained essays on which Raphael had been working since teaching at the Berlin Volkshochschule. It was re-edited in German, from the typescript and appeared in 1989 as part of the Suhrkamp Werkausgabe, of 1989 as "Wie will ein Kunstwerk gesehen sein," where the editorial account of the volume can be found at pages 261-368. The comments from Herbert Read is to be found in "Introduction," xv of *The Demands of Art*.
4. For fuller secondary sources see Andrew Hemingway, *Marxism and the history of Art; From William Morris to the New Left*. Pluto London, 2006. Chapter 5 of this publication is entitled "Max Raphael: Aesthetics and Politics," 89-106, and footnotes at 239-241, with references to the work of Tagg and others. For Tagg's contribution see his edition, with Inge Marcuse of *Proudhon, Marx, Picasso*, Lawrence and Wishart, London, 1980.
5. See: Max Raphael. *Arbeiter, Kunst und Künstler*, (Dresden: Verlag der Kunst, 1975), 391-410, with a post-script by Tanja Frank, "Max Raphael's *Kunsttheoretischen Konzeption*," the first introduction to Raphael's work in the former DDR or German Democratic Republic.
6. See: Denise Modigliani, in edition, *Max Raphael Questions d'art*, (Paris; Klincksieck, 2008), 7 -80.
7. A paperback version of Wilson's work has been available since 2016.
8. I acknowledge the immense help I had from Professor Schaefer, who made available working material from Norbert Guterman, and others on Raphael's writings on this subject. I have followed their work closely.
9. Raphael raised the question, which may be taken as the fundamental guiding question of his research in response to what he took as the brilliantly formulated, but still unresolved theory of art in Marx's, "Zur Kritik der politischen Ökonomie" : "But the difficulty is not in grasping that Greek art and epos are bound up with certain forms of social development. It rather lies in understanding why they still consti-tute with us a source of aesthetic enjoyment, and in certain respects prevail as the standard and model beyond attainment." (MEW, vol., 13, p.640 ff, Marx-Engels Werke, Dietz Verlag, Berlin.) See my dis-cussion in "Max Raphael, Dialectics and Greek Art," ed. Stanek and Kaminer, Footprint (Autumn, 2007): 57-77.
10. I am following the text as established for the Suhrkanp Werkausgabe, Max Raphael, Tempel, Kirchen und Figuren, "Der klassische Mensch, dargestellt am Peirithoos im Westgiebel des Zeustemples von Olympia," (Frankfurt-am-Main: Suhrkamp, 1989), 293-399.

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Bio

Patrick Healy is a senior researcher at Delft University of Technology, Faculty of Architecture and the Built Environment, and Professor of Inter-disciplinary research for the Free International University, Amsterdam. For recent publications see *patrick-healy.com*.