

THE ESSENCE OF ANY CREATIVE ACT IS THE COMMUNICATION OF AN ORIGINAL IDEA FROM ITS AUTHOR, THROUGH A MEANS OF EXPRESSION, TO A RECEIVER. THE MEANS OF EXPRESSION MUST BE SUCH AS TO TRANSMIT THE ORIGINAL INTENTION AS CLEARLY AND FULLY AS POSSIBLE TO THE RECEIVING MIND. THIS NEED FOR CLARITY AND COMPREHENSIBILITY, SO MUCH STRESSED BY THE GESTALT PSYCHOLOGISTS, IS CRITICAL TO THE DEVELOPMENT OF ANY MEANS OF COMMUNICATION. SUCH FACTORS AS SCALE, HARMONY AND PATTERN SHOULD THEREFORE BE THOUGHT OF PRIMARILY AS AIDS TOWARDS COMPREHENSIBILITY OF EXPRESSION. FORMAL ORDER, THEREFORE, CANNOT BE CONSIDERED AS AN END IN ITSELF BUT ONLY AS SUBSERVIENT TO CLARITY. ARCHITECTURE, AS A MEANS OF EXPRESSION, CAN CALL UPON SEVERAL ELEMENTS TO CONTRIBUTE TO THE ARCHITECTURAL EQUATION, WHICH CAN BE THOUGHT OF AS: CONCEPT OR INTENT; FUNCTION; STRUCTURE; TECHNICS; FORM. IT WILL BECOME OBVIOUS AS THESE ELEMENTS ARE INVESTIGATED THAT THEY DO NOT HAVE EQUAL MAGNITUDE OR IMPORTANCE.

IN THE PAST THERE HAVE BEEN THEORISTS WHO HAVE CLAIMED THAT ARCHITECTURE IS IN GENERAL TO BE EQUATED WITH ONE OR OTHER OF THESE ELEMENTS, BUT THESE THEORISTS HAVE DIFFERED AS TO WHICH ONE SHOULD RECEIVE PRIORITY. IT WOULD SEEM FROM CERTAIN PASSAGES IN CHOISY THAT ARCHITECTURE SHOULD BE THOUGHT OF AS PREDICATED BY TECHNICS. OTHER LATE NONETEENTH CENTURE THEORISTS, AMONG THEM LOUIS SULLIVAN, WOULD HAVE SAID THAT ARCHITECTURE IS PRIMARILY A MANIFESTATION OF FUNCTION. EARLY MODERN THEORISRS HAVE CHARACTERISTICALLY INCLINED TOWARDS A SOCIOLOGICAL OF HISTORICIST POSITION, AS WHEN THEY SPEAK OF ARCHI-

1: See Kurt Koffka : 'Principles of Gestalt Psychology'. New York 1935. Page 642.

2: These are for Bruno Zevi, the 'Laws, Qualities, Rules and Principles' of the 'Formalist Interpretation' c.f. Bruno Zevi: 'Architecture as Space'. p.p.193

3: Most contemporary writers have tended to obscure their initial statement of 'the architectural equation' by introducing specific perceptual qualities. Thus: 'Les elements ...: Lumier, fonction, materiaux, volume, temps, espace, couleur.' Theo Van Doesburg, Conference at Madrid 1930.

4: See for example his discussion on the shape of doric pediments; Choisy, A: 'Histoire de L'Architecture.' Paris, 1899. Vol.1

5: c.f. Louis Sullivan : 'Kindergarten Chats' N.Y. 1947.

TECTURE AS EXPRESSING THE 'SPIRIT OF THE AGE' OR THE 'WILL OF THE EPOCH' THERE-  
 BY IMPLICITLY GIVING PREFERENCE TO THE ELEMENT OF CONCEPT OR INTENT.<sup>6</sup> BUT NONE  
 OF THESE THEORISTS HAVE ATTEMPTED TO DEFINE THE PRECISE MEANING OF THE TERMS  
 THEY USE, NOR THE EXTENT TO WHICH FORM IS EITHER SUBSERVIENT OR PREDOMINANT  
 AMONG THE ELEMENTS NAMED: THOUGH, TO BE SURE, THE RELATIVE IMPORTANCE OF THESE  
 ELEMENTS AND THEIR RELATIONSHIP TO ONE ANOTHER CANNOT BE ESTABLISHED BY DEFINI-  
 TION ALONE, SINCE THIS WOULD CONSTITUTE ONLY AN INITIAL CATEGORISATION OF THE  
 PROBLEM. SUCH A PARTIAL ORDERING CANNOT BY ITSELF FURNISH A RATIONAL DISCIPLI-  
 NE FOR ARCHITECTURE, AND BECOMES DANGEROUS WHEN USED IN A WILFUL OR CAPRICIOUS  
 MANNER IN THE DESIGN PROCESS.

6: c.f. Mies van der Rohe : 'Baukunst  
 Und Zeitwille'. Der Querschnitt.  
 4:31-2. 1924. ('Architecture is  
 the will of the epoch translated  
 into space.') and again in G. No.2  
 1923

THE ROOT CAUSE OF THE ARCHITECTURAL CONFUSION THAT ALL TOO OFTEN CONFRONTS US  
 IS THE UNCO-ORDINATED OR NON-RATIONAL INVOKING OF THIS OR THAT ELEMENT. NOR IS  
 THE PROBLEM EASILY RESOLVED: FOR EXAMPLE, THE DICTATES OF FORM ARE NOT ALWAYS  
 WHOLLY RECONCILABLE WITH THE REQUIREMENTS OF FUNCTION; AND AGAIN, A FUNCTION  
 THAT APPEARS AS SYMBOLIC TO ONE PARTICULAR CULTURE MAY APPEAR AS UTILITARIAN  
 TO ANOTHER.<sup>7</sup> THIS IS NOT TO IMPLY THAT THE ELEMENTS NAMED ARE BY NATURE MUTUAL-  
 LY ANTAGONISTIC, BUT RATHER THAT WHEN THEY ARE WEIGHTED EQUALLY THEIR SIGNIFIC-  
 ANT IDENTITIES ARE LOST IN A WAY WHICH INEVITABLY VITIATES THE EFFECT OF THE  
 RESULT. IT FOLLOWS FROM THIS THAT A RATIONALLY CONCEIVED HIERARCHY OF THE  
 ELEMENTS IS A NECESSARY PRECONDITION FOR THE SOLVING, AND INDEED FOR THE CLEAR  
 FORMULATION, OF AN ARCHITECTURAL PROBLEM. SUCH A HIERARCHY COULD BE DERIVED  
 FROM BOTH THE PARTICULAR AND THE GENERAL DEMANDS WHICH THE PROBLEM IMPOSES. TO  
 STATE THIS POINT ANOTHER WAY: A BASIC PRIORITY MUST BE ESTABLISHED IN ARCHI-  
 TECTURE WHICH IS EVOLVED FROM THE DIALECTIC BETWEEN RELATIVE AND ABSOLUTE ENDS.

7: Hence, as Rudolf Wittkower has poin-  
 ed out, the misrepresentation of  
 Renaissance symbolic values in the  
 nineteenth century: 'The ethical  
 fallacy' of Ruskin. Rudolf  
 Wittkower: 'Architectural Princip-  
 les in the Age of Humanism' (origi-  
 nally vol.19, studies of the War-  
 burg Institute) London 1952.  
 Chapter 1

THE PROPOSING OF THIS PRIORITY IS OF CRITICAL IMPORTANCE TODAY SINCE OUR SOCIAL ECONOMIC AND TECHNOLOGICAL ENVIRONMENT HAS BECOME SO OVERWHELMINGLY DISTENDED THAT NO SIGNIFICANT ORDER CAN BE PERCEIVED BY THE INDIVIDUAL. MOREOVER THE PROLIFERATION OF NEW TECHNOLOGICAL MEANS HAS EVOLVED BEYOND THE ARCHITECT'S ABILITY TO UTILIZE RATIONALLY ITS FULL POTENTIAL. IN THESE CIRCUMSTANCES ARCHITECTURE SEEMS TO HAVE TAKEN REFUGE IN MANNERISM AND THE CULT OF SELF EXPRESSION IN A COMPULSIVE EMPHASIS ON THE ISOLATED CREATION WITHOUT REGARD TO A TOTAL ORDER. THIS NEED FOR INDIVIDUAL EXPRESSION IS A LEGITIMATE ONE, BUT IF IT IS TO BE SATISFIED WITHOUT PREJUDICE TO THE COMPREHENSIBILITY OF THE ENVIRONMENT AS A WHOLE, A GENERAL SYSTEM OF PRIORITIES MUST BE PROPOSED; AND IT WILL BE ARGUED HERE THAT SUCH A SYSTEM MUST NECESSARILY GIVE PREFERENCE TO ABSOLUTE OVER TEMPORAL ENDS. THE NEED FOR SUCH A HIERARCHY MAY BE SEEN IN THE OPPOSITION THAT MAY ARISE BETWEEN THE INTERNAL AND THE EXTERNAL (OR ENVIRONMENTAL) REQUIREMENTS OF A PARTICULAR BUILDING. DIFFERENT WEIGHTING OF THESE TWO FACTORS COULD PRODUCE OPPOSITE PRIORITIES. THUS THE BUILDING MIGHT BE CONCEIVED INITIALLY IN RESPONSE TO THE DEMANDS OF INTERNAL FUNCTION. IF THIS WERE TO BE EXCLUSIVELY THE CASE, IN THE SENSE THAT THE EXISTENCE OF EXTERNAL FACTORS WAS DENIED, THE PRIORITY IMPLIED WOULD BE ABSOLUTE EVEN THOUGH THE INTERNAL CONSIDERATIONS RELATE ONLY TO THE BUILDING IN QUESTION. SUCH A BUILDING MIGHT BE SAID TO PREDICATE AN IDEAL FUTURE SITUATION BY VIRTUE OF ITS REJECTION OF EXISTING PATTERNS. IF ON THE OTHER HAND THE DESIGN WERE IN FACT TO ACKNOWLEDGE THE EXISTENCE OF EXTERNAL CONDITIONS AND WERE TO BE MODIFIED BY THEM, THEN ITS INTERNAL RESOLUTION WOULD BE SUBORDINATED TO AN EXTERNAL STATE OF AFFAIRS, AND THIS WOULD INITIALLY ESTABLISH A PRIORITY OF RELATIVE ENDS.

HOWEVER, IF WE POSTULATE THE GENERAL SITUATION, THE TOTAL EXTERNAL ORDER, AS

8: c.f. Colin Rowe 'Mannerism and Modern Architecture'. *Architectural Review*. Vol.107.1950. ('Abstraction in Contemporary Art' makes reference to a world of personal sensation, and typifies the private workings of the artist's mind')

OUR ABSOLUTE, THEN IT FOLLOWS THAT A SPECIFIC SITUATION BY ITS VERY NATURE LIMITS US TO RELATIVE ENDS: THAT IS TO SAY THE INDIVIDUAL BUILDING IS NOW SEEN AS A RELATIVE END WITH REGARD TO ITS ENVIRONMENT. THE INDIVIDUAL BUILDING CAN NOT NOW BE REGARDED AS AN ISOLATED ENTITY, AS AN END IN ITSELF, BUT MERELY AS A TRANSITIONAL ELEMENT IN THE ESTABLISHMENT OF THE WHOLE. IT MAY STILL ASSUME AN INTEGRAL CONDITION, AN 'IDEAL' STATE IN ITSELF, BUT ONLY WITHIN THE LIMITATIONS IMPOSED BY AN ENVISAGED FUTURE ORDER. IN PRAGMATIC TERMS IT IS CLEARLY IMPOSSIBLE TO CREATE A SPECIFIC BUILDING WITH A FIXED ABSOLUTE END IN VIEW, BECAUSE EACH NEW UNIT WILL NOT ONLY CHANGE THE EXISTING PATTERN BUT WILL ALSO MODIFY BY ITS PRESENCE ANY FUTURE UNITS. FOR EXAMPLE, IN CONSIDERING A BUILDING, ENTRANCES CANNOT BE LOCATED WHERE NO MEANS OF ACCESS EXISTS AT THE MATERIAL TIME. TO THIS EXTENT ANY BUILDING MUST ACKNOWLEDGE GIVEN EXTERNAL PATTERNS, ALTHOUGH THESE MIGHT ADMITTEDLY BE CONSIDERED AS PARTS OF A FUTURE ABSOLUTE ORDER. TO COMPLICATE THE ISSUE STILL FURTHER, ANY PLANNING MUST TAKE INTO ACCOUNT THAT ANY FUTURE ORDER BY ITS NATURE, CANNOT BE A CONSTANT OR STATIC ENTITY. IT MUST RATHER BE THOUGHT OF AS CONTINUOUS, AND CAPABLE OF ACCEPTING GROWTH AND CHANGE.<sup>9</sup> ANY NOTION OF A FUTURE ORDER IN ABSOLUTE TERMS WOULD BE OPEN TO THE CRITICISM THAT IT IS ROMANTIC-UTOPIAN.<sup>10</sup> SANT'ELIA'S DESIGNS FOR A 'CITTA NUOVA' ARE NOTABLE EXAMPLES OF THIS KIND OF VISIONARY APPROACH.<sup>11</sup> FOR SANT'ELIA, THE FUTURIST NOTIONS OF ENERGY AND SPEED WERE ABSOLUTES FOR WHICH HE SOUGHT ARCHITECTONIC EXPRESSION.<sup>12</sup> BUT IN DOING SO HE INVOLVED HIMSELF IN AN ESSENTIAL CONTRADICTION, SINCE THE BUILDINGS HE DESIGNED, BEING NECESSARILY SPECIFIC, COULD ONLY PRESUPPOSE A RELATIVE, I.E. A FIXED, FUTURE STATE. UPON THESE SPECIFIC DESIGNS HE IMPOSED AN AESTHETIC OF AERODYNAMIC STREAMLINING SYMBOLIC OF THE FUTURIST UTOPIA. NO MATTER HOW STIMULATING MAY BE THE EFFECT

9: Hence the preoccupation of contemporary planners with 'biological' ways of growth and change; 'Continuity' together with 'Renewal' (c.f. Robert Jeffery: Arch. Design. May 1963)

10: Colin Rowe in 'Granta' January 1959 questions whether 'The revolutionary instrument utopia' is 'in any way compatible with all those ideas of motion, change, growth and history which in the last 150 years have gradually pervaded all thought.'

11: See Giulio Carlo Argan: 'IL pensiero critico di Antonio Sant'Elia'. 'L'Arte', September 1930 and Bruno Zevi: 'Poetica di Sant'Elia e Ideologica Futurista', in 'L'Architettura' November 1956. 'I suoi progetti non inquadrano una effettiva problematica dell'architettura moderna; ...e pathos di una modernità sentita come nuova giovinezza del mondo...danno un'immagine di vivente ideale.' M. Calvesi: 'IL Futurista Sant'Elia. La Casa 6

12: c.f. initial manifesto of Futurism: "Le Figaro", Paris 1909. ('We declare that the world's Splendour has been enriched by a new beauty; the beauty of speed..' pt.4 )

OF THESE IMAGES, THEY REMAIN UNHELPFUL TO ANY REALISTIC THINKING ABOUT THE PROBLEM OF A CONTINUOUS FUTURE PATTERN.<sup>13</sup> A RATIONAL APPROACH TO THIS MUST PREDICATE A TOTAL ORDER - OR, IN THE TERMS OF THIS THESIS, AN ABSOLUTE WHICH IS CAPABLE OF ENCOMPASSING CHANGE AND GROWTH WHILE STILL RETAINING ITS CHARACTER AS AN ABSOLUTE. IT IS THE CONCEPT OF THE PRIORITY OF AN ABSOLUTE OF THIS NATURE WHICH IS CRITICAL HERE, SINCE IT ALONE CAN PROVIDE US WITH THE BASIS FOR A HIERARCHICAL ORDERING OF THE FIVE ELEMENTS. THIS MAJOR TASK MUST NOW BE ATTEMPTED. THE CONTENTION WILL BE THAT ARCHITECTURE IS IN ESSENCE THE GIVING OF FORM (ITSELF AN ELEMENT) TO INTENT, FUNCTION, STRUCTURE AND TECHNICS. THUS FORM IS RAISED TO A POSITION OF PRIMACY IN THE HIERARCHY OF ELEMENTS. TO CLAIM SUPREMACY FOR FORM IN THIS WAY IS TO ADOPT AN ORIGINAL STANDPOINT DESPITE THE FACT THAT ALL ACADEMIC AND RATIONALIST THINKING WELL INTO THIS CENTURY WOULD HAVE PLACED FORMAL CONSIDERATIONS ABOVE ALL OTHERS.<sup>14</sup> BUT THESE WERE FORMAL CONSIDERATIONS OF A DIFFERENT KIND: PREOCCUPATIONS WITH 'FORM FOR FORMS SAKE', WITH MULTI-AXIAL COMPOSITIONS, WITH ARTIFICIALLY SYMMETRICAL AESTHETIC, THE BLATANTLY NON-FUNCTIONAL NATURE OF WHICH DROVE MODERN ARCHITECTS INITIALLY INTO THE SEARCH FOR A NEW MEANS OF EXPRESSION.<sup>15</sup> BUT IF IT IS DEMANDED OF FORM THAT IT SHOULD PROVIDE THE MEANS FOR GIVING COMPREHENSIBILITY TO A TOTAL ENVIRONMENT, IT FOLLOWS THAT A CLEAR PRIORITY ACCRUES TO THE FORM-GIVING PROCESS. ON THIS RECKINING THE FORM OF AN INDIVIDUAL BUILDING NEED NOT NECESSARILY BE EXPRESSIVE OF ITS INTENT OR FUNCTION, AS LONG AS IT CONTRIBUTES TO THE ORDER, SCALE, HARMONY AND PATTERN OF THE TOTAL ENVIRONMENT.

IF THIS POSITION IS TO BE SUSTAINED, A VITALLY IMPORTANT SUBDIVISION MUST BE MADE OF THE GENERAL CATEGORY 'FORM', INTO TWO TYPES: 'GENERIC' AND 'SPECIFIC'. THE TERM GENERIC FORM IS HERE UNDERSTOOD TO MEAN FORM THOUGHT OF IN A PLATONIC SENSE, AS A DEFINABLE ENTITY WITH ITS OWN INHERENT LAWS. THE TERM 'SPECIFIC FORM', ON

13: c.f. Colin Rowe: op. cit., note 10: 'Utopia cannot become the society which it changes; and it cannot therefore change itself.'

14: see for example, Howard Robertson: 'The principles of Architectural Composition' London 1924. p.p.38 et seq.: 'The presence of such apparently illogical forms, (pediment and cornice) if these are necessary from the point of view of composition, is therefore not to be hastily condemned.'

15: 'IV. La fonction. La Nouvelle architecture est fonctionnelle, c.a. d. qu'elle est fondée sur la synthèse des exigences pratiques.' "L'Esprit Fondamental De L'Architecture contemporaine". Barcelona 1930

THE OTHER HAND, CAN BE THOUGHT OF AS THE ACTUAL PHYSICAL CONFIGURATION REALIZED IN RESPONSE TO A SPECIFIC INTENT AND FUNCTION. GENERIC FORM, BECAUSE OF ITS TRANSCENDENT OR UNIVERSAL NATURE, MUST TAKE PRECEDENCE OVER THE OTHER FOUR ELEMENTS. BUT EVEN WHEN FORM IS CONSIDERED IN ITS SPECIFIC SENSE, IT WILL BE SEEN THAT IT STILL REFERS TO, OR IS DERIVED FROM, THE GENERIC - AND THIS ASSOCIATION OR REFERENCE IS AN ESSENTIAL FACTOR IN ITS COMPREHENSION. GENERIC FORM IN ITS ARCHITECTURAL CONTEXT CAN BE CONSIDERED UNDER TWO CATEGORIES: THE LINEAR AND THE CENTROIDAL. A CUBE AND A SPHERE ARE CENTROIDAL. A DOUBLE CUBE AND A CYLINDER ARE LINEAR. EACH OF THESE BASIC SOLIDS HAS BY ITS NATURE CERTAIN INHERENT DYNAMICS, AND THESE MUST BE UNDERSTOOD AND RESPECTED IF ANY GRAMMATICAL USAGE OR INTERPRETATION OF A GIVEN SOLID IS TO BE ATTEMPTED.<sup>16</sup>

THE CUBE AS A CENTROIDAL FORM EVOLVES EQUALLY IN A VERTICAL AND A HORIZONTAL DIRECTION FROM A DEFINED CENTRUM. THIS QUALITY IS PRIMARY TO THE UNDERSTANDING OF IT. OF SECONDARY IMPORTANCE IS THE EQUALITY OF VERTICAL AND HORIZONTAL AXES, THE EQUALITY OF ALL SURFACES, THE DIAGONAL AXES, AND THE LOCATION OF ALL THE CORNERS. BUT THE ESSENTIAL POINT TO NOTE HERE IS THAT THESE PROPERTIES OF THE CUBE, AS OF ANY GENERIC FORM, STAND ABOVE ANY AESTHETIC PREFERENCE. THEY ARE, QUITE SIMPLY, INHERENT CHARACTERISTICS WHICH CAN ONLY BE CONSIDERED IN AN OBJECTIVE SENSE; THEY ESTABLISH THE ABSOLUTE NATURE OF GENERIC FORM, AND BY DEFINITION ITS TRANSCENDENCY OVER SPECIFIC FORM.

THE SAME CONCLUSION IS REACHED WHEN THE MUCH-CANVASSED FORM-FUNCTION INTER-RELATIONSHIP IS CONSIDERED.<sup>17</sup> SINCE NO ONE FUNCTION CAN DO MORE THAN SUGGEST A SPECIFIC FORM, (I.E. CANNOT DETERMINE IT) IN OTHER WORDS THERE IS NO ONE FORM FOR ANY FUNCTION, SPECIFIC FORM CAN BE CONSIDERED TO BE OF A RELATIVE NATURE

16: See Paul Klee, 'The Thinking Eye' edited by Jurg Spiller, London 1961. 'The basic forms, their tensions and inner relations ... the universal cause (of which) is a reciprocal tension, a pull in two directions at once', and also Gyorgy Kepes. 'The language of Vision' p.32: 'To maintain the same constant structure, every organism must achieve a dynamic unity...the dynamic tendency towards balance.'

17: c.f. Horatio Greenough 'Form and Function : Remarks on Art' Los Angeles 1947.

(RELATIVE, THAT IS, TO A PARTICULAR INTERPRETATION OF A PROGRAMME) AND THEREFORE OF A LESSER DEGREE OF IMPORTANCE IN THE HIERARCHY THAN GENERIC FORM. SPECIFIC FORM DEMANDS PERCEPTUAL RESPONSES OF AN AESTHETIC OR SUBJECTIVE NATURE, I.E. TO SUCH FACTORS AS ITS PROPORTION, QUALITY OF SURFACE, STRUCTURE, SYMBOLISM ETC. GENERIC FORM DOES NOT ASK TO BE CONSIDERED IN THESE TERMS. IT IS NOT A QUESTION OF OUR LIKING OR DISLIKING A CUBE: IT IS A QUESTION OF OUR ACCEPTING ITS EXISTENCE AND RECOGNISING ITS INHERENT PROPERTIES. BUT SPECIFIC FORM, SINCE IT EXISTS IN A CLOSE SYMBIOTIC RELATIONSHIP WITH THE OTHER ELEMENTS OF THE ARCHITECTURAL EQUATION MUST BE ANALYSED IN RELATION TO THEM. THERE IS, HOWEVER, THE APPARENT CONTRADICTION BETWEEN, ON THE ONE HAND, THE CONCEPT OF A FUTURE PATTERN WHICH IS CAPABLE OF CONTINUAL GROWTH, AND ON THE OTHER HAND THE CONCEPT OF GENERIC FORM, WHICH, CONSIDERED IN ITSELF, IS A STATIC ENTITY, AND NOT CAPABLE OF CHANGE. RECONCILIATION IS POSSIBLE IN VIEW OF THE FACT THAT ANY

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GENERIC FORM HAS AN ADDITIVE OR REPRODUCTIVE QUALITY WHICH ALLOWS IT TO GENERATE AND MULTIPLY, SO THAT EVEN THOUGH THE PROPERTIES OF A SINGLE CUBE HAVE BEEN STATED AND ANALYSED ANOTHER CUBE OR A SERIES OF CUBES CAN ALWAYS BE ADDED TO IT: THE ONLY STIPULATION BEING THAT THESE ADDITIONS BE UNDERSTOOD AS CAUSING PERCEPTIBLE CHANGE IN THE STATE OF THE ORIGINAL CUBE.

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IN AN ARCHITECTURAL SITUATION THE EMERGENCE OF GENERIC FORM ALWAYS FOLLOWS FROM A CONSIDERATION OF THE STATED CONDITIONS. A BUILDING DOES NOT DEVELOP INITIALLY FROM A PLATONIC NOTION OF FORM, BUT RATHER FROM CONSIDERATIONS OF INTENT AND FUNCTION. THIS LEADS TO THE ASSEMBLAGE OF A SPECIFIC FORM, WHICH MAY THEN BE CRITICISED AND MODIFIED WITH REFERENCE TO ITS COGNATE GENERIC FORM. THUS, FOR EXAMPLE, WHEN THE SPECIFIC FORM OF A CUBE WITH A CENTRAL

18: see Herman Weyl, 'Symmetry' Princeton 1952.

19: Thus Focillon when talking of 'forms in the realm of matter': 'all different kinds of matter ...are form...Their form in its raw state evokes, suggests, and propagates other forms, .. this is because this form liberates other forms according to its own laws.

But ..all these varieties of matter which demand so much from form and which exert so powerful an attraction upon the forms of art, are in their own turn, profoundly modified .' 'The Life of Forms in Art' 1942

COURT IS EVOLVED FROM A PARTICULAR INTENT AND FUNCTION, IT MUST BE SUBJECTED TO AN ANALYSIS IN GENERIC TERMS BEFORE ITS ORIGINAL SELECTION CAN BE JUSTIFIED AND DEVELOPED APPROPRIATELY.

ALL SPECIFIC FORM IN ARCHITECTURE IS CONCEIVED INITIALLY FROM A CRITIQUE OF TWO OF THE ELEMENTS, INTENT AND FUNCTION - A FACT WHICH CLEARLY INDICATES THAT A PRIORITY MUST BE GIVEN TO CONSIDERATIONS OF INTENT AND FUNCTION OVER THOSE OF STRUCTURE AND TECHNICS. A FURTHER DEFINITION OF INTENT WILL PERHAPS SUBSTANTIATE THIS POINT: THE WORD IS HERE USED TO MEAN THE PRIMARY CONCEPTION OF A THING. <sup>20</sup> FOR EXAMPLE, BEFORE WE CAN BUILD A 'TEMPLE' WE MUST HAVE HAD AN IDEA OR CONCEPT 'TEMPLE'. <sup>21</sup> OWING TO OUR EXPERIENTIAL AND HISTORICAL ASSOCIATIONS IT IS DIFFICULT FOR US TO ISOLATE THE CONCEPT 'TEMPLE' FROM THE FUNCTION 'TEMPLE' OR FROM WHATEVER SPECIFIC FORM WE ASSOCIATE 'TEMPLE'. HENCE THE CLOSE ASSOCIATION BETWEEN INTENT AND FUNCTION: WE MUST ALWAYS HAVE THE CONCEPT OF SOMETHING BEFORE WE CAN ATTRIBUTE A FUNCTION TO IT. BY WAY OF ILLUSTRATION: IT IS EVIDENT THAT THE SAME CONCEPT 'TEMPLE' DID NOT PRODUCE THE SAME SPECIFIC FORM FOR THE GREEKS AS IT DID FOR THE ROMANS OR FOR THE PEOPLE OF THE MIDDLE AGES. INDEED IT NOW BECOMES CLEAR THAT FUNCTION IS A TERM WITH AN INCONVENIENTLY WIDE RANGE OF MEANINGS AND APPLICATIONS: A DISTINCTION MUST BE MADE AT THIS STAGE BETWEEN THE PHYSICAL OR UTILITARIAN AND THE METAPHYSICAL OR SYMBOLIC SENSES OF THE WORD. AT ITS MOST OBVIOUS LEVEL 'FUNCTION' CAN BE THOUGHT OF AS AN ACTIVITY OR USAGE PROPER TO ANYTHING. IF THE FUNCTION STATED IS VERTICAL MOVEMENT, THEN WE CAN PRODUCE THE RESPONSES STAIR, RAMP, OR LIFT, EACH OF WHICH WOULD GENERATE A MORE OR LESS CONSTANT RESULT IN TERMS OF SPECIFIC FORM. IT IS NECESSARY TO NOTE THAT THIS PRODUCTION OF A FORM IS A RESPONSE TO FUNCTION PLUS INTENT, AND NOT TO INTENT ALONE. IT IS ALSO NECESSARY TO NOTE

20: See Erwin Panofsky, 'Meaning in the Visual Arts'. N.Y. 1955 p.11 for a discussion of 'invention'.

21: Erwin Panofsky, 'to perceive the relation of signification is to separate the idea of the concept to be expressed from the means of expressing it'. Similarly 'to perceive the relation of construction' it is necessary to separate the idea of function from the means of fulfilling it. 'Meaning and the Visual Arts' N.Y. 1955 p9.



THAT THE RESPONSE TO A STATED UTILITARIAN FUNCTION CAN PRODUCE A SPECIFIC FORM WHEREAS THE RESPONSE TO A SYMBOLIC FUNCTION IN GENERAL CANNOT. BUT THERE IS A POINT AT WHICH VERTICAL MOVEMENT MAY BE THOUGHT OF IN A SENSE OTHER THAN THE PURELY UTILITARIAN. THIS COMES ABOUT AS SOON AS 'RAMP', 'STAIR' AND 'LIFT' ARE THOUGHT OF AS A TRANSITION, AS MINOR SPACES CONNECTING TWO MAJOR SPACES. THENCEFORTH THE FUNCTION OF THIS SPACE IS NO LONGER CONCEIVED OF AS ENTIRELY UTILITARIAN, BUT SHIFTS INTO THE REALM OF THE 'SYMBOLIC'. IT IS THEN NO LONGER ADEQUATE MERELY TO INSERT A STAIR OR A LIFT BETWEEN THE FLOORS OF A BUILDING: THE EXPERIENCE OF THE STAIR OR LIFT MUST RATHER BE CONSIDERED IN ITS BROADER IMPLICATIONS, IN ITS ROLE AS THE 'SYMBOLIC' TRANSITION BETWEEN ONE SPACE AND THE NEXT.

SYMBOLIC FUNCTION MUST NOT BE CONFUSED WITH INTENT, SINCE THE FORMER IS THE REPRESENTATION OF A TRANSCENDENTAL IDEA. IN ARCHITECTURE THE INHERENT DIFFICULTY THAT ARISES IS THAT THE TYPES OF SPECIFIC FORM IN COMMON USE CHANGE WITH EACH SUCCEEDING AGE, AND THEREFORE THEIR MEANING AS SYMBOLS TENDS TO BE DIFFERENT FOR EACH GENERATION. THE SYMBOLIC FUNCTION, IN THE SENSE OF IMPACT ON THE BEHOLDER, OF A GOTHIC CATHEDRAL TODAY IS OBVIOUSLY NOT THE SAME AS IT WAS TO THE PEOPLE OF THE MIDDLE AGES. THIS SUBJECTIVE AND TEMPORAL CHARACTER OF SPECIFIC ARCHITECTURAL SYMBOLS PREVENTS THEIR USE AS A BASIS FOR RATIONAL ARGUMENT. MOREOVER, NOT ALL ARCHITECTURE NECESSARILY INVOLVES A SYMBOLIC FUNCTION, OR THE NEED TO SATISFY THIS REQUIREMENT. THE NOTION 'VERTICAL MOVEMENT'- STAIR' DOES NOT DEMAND SYMBOLIC REPRESENTATION, WHEREAS THE EMBODIMENT OF SPIRITUAL, MORAL OR INTELLECTUAL ASPIRATION IN THE DESIGN OF A TEMPLE DOES. FURTHERMORE, AS HAS ALREADY BEEN SUGGESTED, THE RESPONSE TO UTILITARIAN FUNCTION TENDS TO PRODUCE SPECIFIC

22: 'This is the humanism of architecture: the tendency to project the image of our functions into concrete forms is the basis for architecture of creative design. The tendency to recognise, in concrete forms, the image of those functions is the true basis in its turn of critical appreciation.' Geoffrey Scott, 'The Architecture of Humanism.' p.213.

23: Thus E. Baldwin Smith: 'The problem of presenting a convincing exposition of symbolic intent... is made difficult by the modern conviction that architecture ... has always been created for utilitarian and aesthetic reasons.' 'The Architectural Symbolism of Imperial Rome and the Middle Ages'. Princeton 1956. Similarly E. Gombrich 'First the symbolic function was denied a place in art, then the representational function as such was placed outside the pale; we have become used to the identification of all art with the function of expression'. 'The visual image in Neo-Platonic Thought'. Journal of the Warburg and Courtauld Institutes. Vol. XI 1948.

24: c.f. Otto von Simson 'The Gothic Cathedral' N.Y. 1956. Introduction p.XIX.

25: See Nikolaus Pevsner 'An Outline of European Architecture' Introduction.

FORM, WHEREAS THE RESPONSE TO SYMBOLIC FUNCTION TENDS TO PRODUCE GENERIC FORM - THE PLATONIC SOLID AND THE PLATONIC IDEA ARE CLOSELY RELATED. THE SITUATION IS COMPLICATED BY THE USES IN CERTAIN CASES OF SPECIFIC FORMS, DERIVED INITIALLY FROM UTILITARIAN FUNCTION, TO GIVE SYMBOLIC MEANING. THIS FORMS ARE FOUND IN MODERN ARCHITECTURE THAT ORIGINALLY SERVED A UTILITARIAN PURPOSE APPEARING AS SYMBOLIC REFERENCES TO THE IDEA OF A MODERN SOCIETY. THIS INVESTITURE WITH QUASI-TRANSCENDENTAL VALUES OF CERTAIN SPECIFIC FORMS SEEMS PECULIAR TO MODERN ARCHITECTURE. IN PANOPSKY'S TERMS IT IS THIS TRANSFERENCE THAT LEADS TO A DEVALUATION OF THE ORIGINAL MEANING OF THE FORM IN QUESTION. AN EXAMPLE WOULD BE STREAMLINING, WHICH WAS ORIGINALLY A UTILITARIAN RESPONSE TO THE EFFECT OF EXTREME WIND STRESSES. THIS KIND OF FORM HAS SINCE, AS MANY CRITICS HAVE POINTED OUT, BEEN ARBITRARILY APPLIED IN A WIDE RANGE OF DESIGN SITUATIONS AS A SYMBOLIC EVOCATION OF TWENTIETH CENTURY ATTITUDES AND SENSIBILITY.

AS ANOTHER ILLUSTRATION OF THIS POINT, THE EXAMPLE OF THE TEMPLE CAN BE USED AGAIN. CLEARLY IN ANY GIVEN INSTANCE BOTH KINDS OF FUNCTION (THE UTILITARIAN AND THE SYMBOLIC) MUST DERIVE FROM THE ORIGINAL CONCEPT 'TEMPLE'. IN THE PURELY UTILITARIAN SENSE THE FUNCTION 'TEMPLE' COULD BE EQUATED WITH 'GATHERING-PLACE-FOR-LARGE-GROUPS-OF-PEOPLE'. FROM THIS THE IMAGE OF A LARGE SPACE WITH A ROOF OVER IT COULD BE EVOKED. BUT FURTHER IF THIS 'TEMPLE' IS GOING TO SERVE AS 'FOCAL-POINT-OF-THE-WORSHIP-OF-THE-COMMUNITY' A SYMBOLIC FUNCTION IS IMPUTED TO IT. THE RESPONSE IN TERMS OF A SPECIFIC FORM CAN NO LONGER BE 'A-SPACE-WITH-A-ROOF-OVER-IT'. THIS ROOF IS NOW SEEN AS DIFFERENT FROM ALL OTHER ROOFS IN PROXIMITY TO IT. IT MAY TAKE A DIFFERENT FORM, HAVE A DIFFERENT STRUCTURE, BE CONSTRUCTED OF DIFFERENT MATERIALS, ALL OF WHICH WOULD TEND TO ISOLATE THE

26: Hence the arguments put forward by the member of Team X to explain the limitations of the 'Four Routes' of C.I.A.M.

27: 'Meaning in the Visual Arts', p.13 footnote. 'Streamlining was, originally a genuine functional principle etc.'

28: for example the work of the German Expressionist School - notably the Einstein Tower, Potsdam, 1919-21. by Eric Mendelsohn.

29: The Symbolic functions of Ciboria and city gates are examined exhaustively by E. Baldwin Smith, op. cit. note 23.

THE BUILDING FROM ITS SURROUNDINGS, THUS CAUSING IT TO BE SEEN AS A FOCAL POINT. THIS CLEARLY CAN BE CONSIDERED AS A RESPONSE TO THE DEMANDS OF SYMBOLIC FUNCTION. INITIALLY THE RESPONSE TO UTILITARIAN FUNCTION CAN PRODUCE FROM THE NOTION 'ROOF' THE SPECIFIC FORM 'DOME' RATHER THAN ANY OTHER SPECIFIC FORM OF ROOF. THE TEMPORAL AND SUBJECTIVE NATURE OF SPECIFIC FORMS IS SEEN IN THE FACT THAT THE PERCEPTION OF A DOME PRODUCES DIFFERENT RESPONSES IN DIFFERENT PEOPLE. AN ENGINEER MIGHT SEE IT ONLY IN TERMS OF HOW IT IS SUPPORTED AND THE PROBLEMS INHERENT IN ITS CONSTRUCTION, SUCH AS EDGE STRESSES, CONTINUOUS SURFACES ETC. A RELIGIOUS LEADER MIGHT THINK OF THIS SAME STRUCTURE IN ITS MYSTICAL CONNOTATIONS AND ITS RELATION TO CHURCH LITURGY. A PSYCHOLOGIST MIGHT THINK OF ITS SEXUAL ASSOCIATIONS, AND SO ON. THESE ARE ALL TYPES OF RESPONSES TO THE PERCEPT 'DOME' AS A SPECIFIC FORM. BUT THERE IS ALSO A RANGE OF RESPONSES TO THE CONCEPT 'DOME' WHICH ARE OF A GENERIC NATURE. A DOME IS CENTROIDAL. IT IS EQUALLY EXPANSIVE IN ALL DIRECTIONS. IT SUGGESTS CENTRIFUGAL MOTION. THESE ARE FORMAL ABSOLUTES, ALTHOUGH OF COURSE THEY MUST BE REALISED IN TERMS OF THE PARTICULAR PROBLEM BEFORE IT CAN BE SAID THAT THE PROPER SPECIFIC FORM, THE ACTUAL SHAPE OF DOME, IS APPROPRIATE TO THE SPECIFIC CIRCUMSTANCES. FOR EXAMPLE, IF THERE IS NOT EQUAL ACCESS TO A SITE IT IS HARD TO JUSTIFY THE CHOICE OF A CENTROIDAL FORM IN PREFERENCE TO A LINEAR ONE. IT WOULD BE EQUALLY DIFFICULT TO RATIONALISE THE PLACEMENT OF A CRUCIFORM OR PINWHEEL BUILDING ON A CORNER SITE, SINCE THIS USE OF THIS GENERIC FORM WOULD PRESUPPOSE A SITE WITH ACCESS FROM ALL FOUR SIDES.

IT IS ONLY WHEN A SPECIFIC FORM IS ESTABLISHED FROM A CONSIDERATION OF UTILITARIAN FUNCTION THAT THE PROPERTIES INHERENT IN THE GENERIC FORM CAN BE

30: See Louis Hautecoeur 'Mystique et Architecture' Symbolisme du cercle et de la coupole. Paris 1934, and Jacques Maritain, 'Sign and Symbol. Journal of the Warburg Institute Vol. 1. 1937.

ANALYSED TO TEST THEIR RELEVANCE TO THE SPECIFIC CONDITIONS. THIS IS BY NO MEANS AS RESTRICTIVE AS IT MAY SOUND. A GREAT VARIETY OF COMPLEX SYSTEMS CAN BE DERIVED FROM GENERIC FORM UNDER ANY GIVEN CONDITIONS, AND THE DETAILED DEMONSTRATION OF THIS WILL BE ATTEMPTED IN CHAPTER THREE.

FORM MUST NOW BE EXAMINED IN ITS RELATION TO STRUCTURE AND TECHNICS. STRUCTURE MAY BE THOUGHT OF AS THE BONES, VEINS AND ARTERIES OF ANY BUILDING. IT IS THE FRAMEWORK FOR THE TRANSLATION OF INTENT AND FUNCTION INTO PHYSICAL REALITY. IT INCLUDES NOT ONLY THE COLUMNS AND THE SLABS OF THE STRUCTURE, BUT THE PIPES DUCTS AND CONDUITS OF THE MECHANICAL SERVICES. IF STRUCTURE IS CONSIDERED IN THIS SENSE, THEN TECHNICS ARE THE LIGAMENTS OF ANY BUILDING: THE METHODS USED TO LINK, ARTICULATE AND CONSOLIDATE THE STRUCTURE; WHICH CLEARLY ESTABLISHES A SUBORDINATE RELATIONSHIP OF TECHNICS TO STRUCTURE IN THE HIERARCHY OF ELEMENTS. STRUCTURE MUST NOW BE CONSIDERED IN RELATION TO THE OTHER ELEMENTS. AN ORTHOGONAL ARRANGEMENT OF COLUMNS AND SLABS IN ITS ABSTRACT AND ABSOLUTE STATE CAN BE ANY SIZE, ITS ONLY LIMITATION, ONCE IT BECOMES SPECIFIC, BEING THAT IMPOSED BY THE PHYSICAL PROPERTIES OF THE MATERIALS EMPLOYED. THE SIMPLICITY, REGULARITY AND SCALE OF THE COLUMNS ARE AS YET NOT AFFECTED BY ANY OTHER CONSIDERATIONS. AS THESE COLUMNS STAND UNMODIFIED BY INTENT, FUNCTION OR FORM, THEY ARE OBEYING ONLY THE ABSOLUTE CONDITIONS NECESSARY TO THEIR OWN ORGANISATION. THIS FURTHER TESTIFIES TO THE TRANSCENDENCE OF GENERIC CONDITIONS OVER SPECIFIC CONDITIONS, SINCE STRUCTURE IN THIS SENSE CAN BE CONSIDERED TO BE GENERIC IN CHARACTER.

31: Rather as Michelangelo thought of the 'orders' c.f. J Ackerman 'The Architecture of Michelangelo. Chapter I: Michelangelo's 'theory' of Architecture.'

IT IS ONLY WHEN CONSIDERATIONS OF INTENT AND FUNCTION BECOME OPERATIVE THAT

THE UNIT-SIZE MAY BE DETERMINED, NOT ONLY IN TERMS OF STRUCTURAL ECONOMY BUT ALSO IN TERMS OF A SCALE SUITED TO ACCOMMODATE THE MAXIMUM NUMBER OF SPECIFIC FUNCTIONS. THESE TWO EXIGENCIES MAY WELL BE IN MUTUAL CONFLICT, AND IT IS HERE THAT THE WHOLE MECHANISM OF PRIORITIES OR HIERARCHY OF ELEMENTS MUST BE CALLED INTO PLAY. IF AT THE OUTSET A PREFERENCE HAS BEEN STATED FOR INTERNAL FUNCTION, THEN THE COLUMNAR ARRANGEMENT IS DISTORTED TO SUIT THE FUNCTION AND THE SELECTION OF MATERIAL FOR IT IS THEN BASED ON THE REQUISITE BAY SIZE. THIS DISTORTION RESULTING FROM INTERNAL FUNCTIONAL CONSIDERATIONS WOULD BE AN EXAMPLE OF A PRIORITY BEING ACCORDED TO TEMPORAL OVER ABSOLUTE ENDS. BUT TO CORRECT THIS INITIAL DISTORTION, WHILE STILL ACKNOWLEDGING INTERNAL FUNCTIONAL CONSIDERATIONS WOULD BE AN ATTEMPT TO RE-ESTABLISH THE PRIORITY OF ABSOLUTE ENDS.

DECISIONS AS TO SPECIFIC STRUCTURAL FORM ARE THUS SEEN TO BE DERIVED ULTIMATELY FROM GENERIC FORM. THERE IS NO LIMITATION ARGUABLE FROM THE OTHER ELEMENTS WHICH CAN DICTATE WHETHER A COLUMN IS TO BE ROUND, SQUARE, CRUCIFORM, OR RECTILINEAR ETC.. THIS IS A DECISION THAT CAN ONLY EVOLVE FROM THE EXIGENCIES, EITHER OF A TOTAL ORDER OR OF THE PARTICULAR GENERIC FORM IN QUESTION.

TECHNICS ARE THE DETAILS AND METHODS OF ARCHITECTURE: ITS MEANS OF FABRICATION AND PRODUCTION, AND ITS METHODS OF JOINING, SEALING, AND FIXING. BECAUSE OF ITS UTILITARIAN NATURE, TECHNICS RELATE ALMOST ENTIRELY TO THE SPECIFIC RATHER THAN THE GENERIC, AND CONSEQUENTLY RECEIVES THE LOWEST PRIORITY IN THE HIERARCHY OF ELEMENTS. THIS WOULD SEEM TO BE A CONTRADICTION IN TERMS IN THE LIGHT OF CONTEMPORARY THINKING ABOUT STANDARDIZATION AND PREFABRICATION.<sup>32</sup> How-

32: c.f. Walter Gropius 'In all great epochs of history the existence of standards - that is the conscious adaption of type forms - has been the criterion of a polite and well ordered society - the main task of contemporary design is therefore the achievement of these norms in terms of an industrial technique.' and earlier, Hermann Muthesius; 'It is only by standardisation that they (architecture and the activity of the Werkbund) can recover that universal importance which they possessed in ages of harmonious civilisation.' etc.. Annual Meeting of the Werkbund, Cologne 1914.

-EVER, THIS LOW PRIORITY DOES NOT DENY THE IMPORTANCE OF TECHNOLOGY, BUT RATHER ATTEMPTS TO PLACE IT IN RELATION TO AN ABSOLUTE SCALE OF VALUES. IT IS OBVIOUS THAT A MORE COMPLEX SOCIETY DEMANDS FUNCTIONS OF A MORE COMPLEX NATURE, WHICH IN TURN GIVE RISE TO A NEED FOR A MORE ELABORATE TECHNOLOGY. IN ANY PROCESS THERE IS OFTEN A 'FEED-BACK' IN THE RELATIONSHIP OF PARTS TO EACH OTHER. THEREFORE AS THE MEANS EXPAND SO DO THEIR SCOPE OF APPLICATION WHICH THEN SUGGESTS NEW FORMS AND FUNCTIONS. FOR EXAMPLE, IF A NEW PRODUCT IS DEVELOPED, THERE IS A CORRESPONDING COMPULSION TO USE IT. THE DANGER HERE DOES NOT LIE IN THE FACT THAT A TECHNICAL AGE WILL PRODUCE ITS OWN FORMS, BUT RATHER THAT THESE FORMS, EVOLVED FROM PURELY UTILITARIAN, TECHNICAL PROCESSES WILL BECOME INVESTED WITH SYMBOLIC MEANING. IN THE FIRST INSTANCE, HOWEVER, TECHNICS DO HAVE AN EFFECT ON SYSTEMIC DEVELOPMENT AS WILL BE NOTED IN THE FOLLOWING CHAPTERS. A CUBE CONCEIVED OF IN CONCRETE CANNOT EVOKE THE SAME SYSTEMIC RESPONSE AS A CUBE CONCEIVED OF IN STEEL. WHEREAS A CONCRETE CUBE COULD BE TREATED AS EITHER 'MASS' OR 'SURFACE', IT WOULD BE DIFFICULT TO CONCEIVE OF A STEEL CUBE TREATED AS A 'MASS' SINCE IT IMPLIES A COLUMNAR ORDER. BUT CONVERSELY, IT COULD BE ARGUED FROM THE HIERARCHY OF ELEMENTS THAT A GENERIC CUBE SHOULD NOT INITIALLY RECEIVE THE SPECIFIC LIMITATIONS IMPOSED BY THE TECHNICS OF STEEL AND CONCRETE.

THERE ARE, HOWEVER, SITUATIONS WHERE TECHNICS WILL OBVIOUSLY RECEIVE A STRONGER WEIGHTING, DEPENDING UPON PROGRAMMATIC REQUIREMENTS. IT IS OBVIOUS THAT 'PRESTIGE' BUILDINGS, AS LONG AS THEY EXIST AS FOCAL POINTS IN THE FRAMEWORK OF A TOTAL ENVIRONMENT, WILL NOT REQUIRE THE SAME DEGREE OF STANDARDIZATION OR PREFABRICATION OF PARTS AS WILL LARGE SCALE HOUSING AND INDUSTRIAL PROJECTS. HOWEVER, THE NOTION OF 'TECHNIQUE' THOUGHT OF AS THE PRECISE IMPLEMENTATION OF

TECHNICS, WOULD PROBABLY RECEIVE MORE IMPORTANCE IN THE INDIVIDUAL BUILDING THAN IN THE LARGE SCALE DEVELOPMENT. IT MUST BE REMEMBERED THAT 'TECHNIQUE' AND 'TECHNICS' CANNOT BE MERELY AN APPLIQUE TO ARCHITECTURAL SITUATIONS. THE SPECIFIC FORMS THAT ARE GIVEN TO 'TECHNICS' AND THE FORM THAT EVOLVES AS A RESULT OF THE BINDING TOGETHER OF PARTS THROUGH TECHNICS MUST BE SUBSERVIENT TO A TOTAL ORDER; TECHNOLOGY SHOULD NOT BE IMPOSED ON CONCEPT, FUNCTION, STRUCTURE, OR FORM. ONLY AN ARCHITECTURAL LOGIC BASED ON GENERIC FORM CAN ACHIEVE THIS ORDER; NEVERTHELESS, IT CANNOT BE TOO STRONGLY EMPHASISED THAT THE END-PRODUCT CAN ONLY BE A SYNTHESIS OF FORM WITH THE OTHER ELEMENTS OF THE ARCHITECTURAL EQUATION.

THIS SYNTHESIS CAN BE SEEN IF A POINT BLOCK WHICH IS GENERICALLY CENTROIDAL IS COMPARED WITH A SLAB BLOCK WHICH IS GENERICALLY LINEAR. BOTH EVOLVE FROM THE INTENT AND FUNCTION OF A VERTICAL PLACEMENT OF UNITS. EACH BLOCK MUST CLEARLY EXPRESS ITS GENERIC DERIVATION AS A CENTROIDAL OR A LINEAR CONFIGURATION. THE RESOLUTION OF THE PROBLEM OF VERTICAL CIRCULATION, COMMON TO BOTH, WOULD SEEM A LOGICAL BASIS FOR BOTH THEIR EVOLUTION AND THEIR CORRELATION WITH GENERIC FORM. A MERE GRAFTING OF A LIFT TOWER TO EITHER (AS IS SOMETIMES DONE WITH THE IDEA THAT THE EXPRESSION OF VERTICAL ORIENTATION IS THEREBY CLARIFIED) ONLY AMOUNTS TO A PICTURESQUE MANIFESTATION OF ITS UTILITARIAN FUNCTION. IF INSTEAD A SPECIFIC FORM WAS EVOLVED FOR THIS VERTICAL MOVEMENT THAT SATISFIED NOT ONLY ITS UTILITARIAN FUNCTION BUT ALSO ITS 'SYMBOLIC' FUNCTION AS A TRANSITION FROM GROUND LEVEL TO ANY RAISED LEVEL, AND WAS FURTHERMORE EXPRESSIVE OF THE GENERIC QUALITY OF LINEAR FORM, THEN IT WOULD BE PRESENTING THE REQUIRED SYNTHESIS. THUS A CORKSCREW MOVEMENT FROM LEVEL TO LEVEL COULD DEFINE THE CENTROIDAL ASPECTS

OF A POINT BLOCK WHILE A CASCADING, CONTINUOUS MOVEMENT COULD DEFINE THE LINEAR ASPECTS OF A SLAB BLOCK, AND IN EITHER CASE WITHOUT NECESSARILY CREATING A DIVORCE BETWEEN THE SUCCESSIVE LEVELS AND THE MEANS OF MOVEMENT BETWEEN THEM.

THIS CLEARLY DEMONSTRATES THAT THE GIVING OF FORM IS FAR MORE THAN THE MAKING OF SHAPES, OR THE CREATION OF BEAUTIFUL AND AESTHETICALLY PLEASING OBJECTS IN THEMSELVES, FOR THESE ONLY SATISFY THE PERCEPTUAL AND NOT THE CONCEPTUAL ASPECTS OF THE PROBLEM. THE PRESENTATION OF AN ORDER MUST BE INHERENT IN THE GIVING OF FORM, WHETHER IT BE DIRECTED TOWARDS THE CLARITY OF INTENT AND FUNCTION OF A SPECIFIC BUILDING, OR TOWARDS THE CLARITY OF THE RELATIONSHIP BETWEEN THE INDIVIDUAL BUILDING AND THE TOTAL ENVIRONMENT. FORM, IS THEREFORE SPECIFIC, YET AT THE SAME TIME GENERAL. IT PROVIDES FOR ARCHITECTURE, THE PARTICULAR MEANS OF EXPRESSING INTENT AND ACCOMMODATING FUNCTION, AND THE GENERAL MEANS FOR CREATING AN ORDERED ENVIRONMENT.