because they find that the material advantages they have acquired at last do not bring inevitable happiness. The future of the workers is the future of the country itself and it depends to a terrifying extent upon the Catholic laity who are almost alone in knowing where true joys can be found. It is our task to give back to the workers their ancient heritage of faith that, transformed by his Spirit, they may find joy and peace in the love of God on earth until they are called to adore him in the bliss and glory of eternity.

ARCHITECTURE AND NATURAL HARMONY

KENELM FOSTER, O.P.

IN any period men's thoughts about the past tend to harden and simplify into conventional praise or disparagement. This in turn, as fashion and then prejudice, affects the present and the future; until a new generation finds it an intolerable cliché. It is then criticized and perhaps discarded. Modern scholars cannot stomach the old clichés about the Renaissance. To go further back, Voltaire's generation sneered at Dante, whom it did not read, and thought Gothic a style for barbarians; and both these views, with their implications, had become conventional, not to say stale, by the mid-eighteenth century. When, with the new century, the tide turned, the motive was largely religious; a revival of Christian piety, a new interest in theology. But the new outlook could be equally one-sided. Pugin thought Gothic the only Christian style in building and Ruskin thundered against the neo-classical style of the Renaissance—'pagan in its origin, proud and unholy in its revival, paralysed in its old age . . . an architecture invented, as it seems, to make plagiarists of its architects, slaves of its workmen, and sybarites of its inhabitants'.[1] And from this attitude, become in turn a convention as stale as

1 *The Stones of Venice*, vol. III, ch. 4: quoted by R. Wittkower in *Architectural Principles in the Age of Humanism* (1952), p. 1.

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neo-classicism, we inherit (do we not?) much highly unpractical ugliness. Nor is the association of prayer with pointed arches quite dead yet.

The present century's slow movement away from Gothic in ecclesiastical architecture has not however implied any loss of interest in the Middle Ages on the part of scholars or indeed of the educated public in general. Far from it. Never have the philosophy, art and literature of the Middle Ages been so thoroughly studied or keenly appreciated as in recent years. The death of what may be called the Pugin tradition has other causes; which cannot, I suppose, be properly discussed except in terms of modern architectural technique. But the mere amateur in these matters may be permitted a few reflexions on what seens to be a revival of interest in the Humanist architecture of the early Renaissance, to which Mr Joseph Rykwert's recent edition of Leon Battista Alberti's great treatise *De re aedificatoria* provides a very useful introduction.[2]

In the first place one observes, with some surprise (due to ignorance no doubt), that this interest is practical and not merely scholarly or academic. Alberti's book, Mr Rykwert assures us, contains much that 'will appear not only stimulating, but even directly relevant' to 'the younger generation of architects'. How this would please Alberti, could he return among us! No writer on any art can have had intentions more downrightly practical than his. Alberti wrote as a working architect, passionately concerned with the practice of his craft, with the choice of locality and materials and with countless technical details of masonry and mechanics. He was at once a mathematician, a classical archaeologist, and a fervent and philosophical observer of nature in the large-minded manner of his time. Another Leonardo, in short, minus only the spark of highest genius. No wonder that his book—dedicated in 1452 to the great humanist pope Nicholas V—should have been enthusiastically received and assiduously studied by his contemporaries. It was the first full and systematic exposition of 'the new way of building which had been initiated by Brunelleschi' in Florence and was to be continued and developed by Bramante and Palladio. The phases of this movement have

2 *Ten Books on Architecture*, by L. B. Alberti: ed. by Joseph Rykwert (Alec Tiranti Ltd; 35s.). The text used is the English translation of *De re aedificatoria* made by J. Leoni (1755).

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been brilliantly expounded by Professor Rudolf Wittkower, with particular attention to its basis in an abstract theory of symbolic form.[3] Renaissance architecture, this high authority tells us, was not at all (as used to be thought) a worldly or pagan (in the sense of non-religious) architecture; not a purely formal pattern for pleasing man's senses and flattering his pride: it was essentially a technique of expressing in spatial symbols the order and beauty of the universe regarded as an effect of God. True, Professor Wittkower's study is concerned principally with sacred architecture. But this was the field in which the movement represented by Alberti was most conspicuously fruitful; and in which too a symbolist theory of architectural forms would seems to be most readily applicable. For if one can reasonably speak of buildings as spatial symbols of a divine order immanent in natural forms, what buildings are more relevant to such a theory than churches?

This may be what Mr Rykwert has in mind when he writes, in his Foreword: 'the search for a rationale, for an expressive method which prompted Le Corbusier's invention of the Modulor, has now progressed further and issues long forgotten —such as the language of symbolic form in architecture—arouse a new and urgent interest'. In any case it is surely only natural that this remark should stick in the mind of a Catholic reader; especially in view of the entrancing perspectives opened up by Professor Wittkower's exposition of what the Renaissance church builders endeavoured to achieve. 'The centrally planned church was for them the man-made echo or image of God's universe and it is *this* shape which discloses "the unity, the infinite essence, the uniformity and the justice of God".' (These last words are Palladio's.) Here we meet the idea, far older of course than the Renaissance, of the symbolic 'perfection' of the circle. But what in the concrete this relation, between a given church and the cosmos, meant was worked out by the great humanist architects in terms of mathematics and music—that is to say, of the basic geometrical forms (square and circle) and of the numerical proportions revealed in musical harmony. 'The numbers', wrote Alberti, 'by means of which the agreement of sounds affects our ears with delight, are the very same which please our eyes and our minds.' The spatial harmony of a building would thus answer to the

3 *Architectural Principles in the Age of Humanism* (A. Tiranti, Ltd., 1952).

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harmony, inward and outward, of the physical world. For the men of that age the world was a structure of proportions: 'musical consonances', says Professor Wittkower, 'were the audible tests of a universal harmony which had a binding force for all the arts'.

This idea was not new when Alberti wrote; it was only more vividly realised. It was the old Pythagorean conception that All is Number, modified by Plato and Aristotle, and then (to quote Wittkower again) 'supported by a long chain of theologians from Augustine onwards . . . convinced of the mathematical and harmonic structure of . . . all creation'. Now if one inserts 'physical' before 'creation', and if one presupposes a more empiricist epistemology, may one not say that this view of the cosmic order is also St Thomas's? And is it then rash to conclude that it is still essentially the Catholic view of the physical universe? Or is it only our metaphysic that is still Thomist—the physical world being surrendered to a quite different outlook, according to which the 'harmonic order' of the medieval and Renaissance philosophers is mere 'poetic' fancy? The question must surely arise for Catholic artists, as soon as they seriously ask themselves, What does our art-language (be it in stone, paint or any other medium) *mean*? What does it symbolically refer to?

The answer would be given of course that it refers to God and to his revealed purposes in our regard. A church is a place where we meet to worship God and are reminded of the way to do this by crucifixes and statues and appropriate bits of coloured glass. And the design of the church as a whole is determined (*a*) by the traditional cruciform (making the whole church a sort of figure of Christ) and (*b*) by convenience—satisfactory acoustics, a good view of the altar, economy of space, etc. What more do you need or want? Well, frankly, I am not sure: I should like to pass the question to Mr Rykwert, whose pregnant aside about 'the language of symbolic form in architecture' has set my thoughts rambling, perhaps too far. But something is certainly lacking, for better or worse, to our concept of church-building, which was not lacking before, let us say, the mid-seventeenth century—the idea of, and the demand for, a correspondence between a church's structure and the harmony of the natural world conceived as a product of the divine mind. 'We cannot doubt', wrote Palladio (before 1570), 'that the little temples made by us ought to resemble

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this exceedingly great one which, deriving from God's immense goodness, was perfectly completed with one word of his.' But in fact we do doubt this; or rather we hardly think of it at all. It hardly occurs to us that a church should resemble the harmony of the universe. Is it that we are more supernaturally-minded than those old philosophers and architects? Or just less intelligent? Or frightened by the scientists?

A church, it would be agreed, ought to have 'beauty'—though this term is becoming significantly rare in modern English. And what is the beauty of a building? For Alberti it was chiefly a harmony of the parts (*concinnitas*); in which phrase he is only echoing the traditional definition that one may find in various places, more or less explicitly, in St Thomas's *Summa Theologica*: wholeness (*integritas*), due proportion and consonance (*consonantia*), and a certain radiance (*claritas*).[4] And this harmony did not, as Wittkower points out, result from personal fancy, but from objective reasoning and a correct assessment of proportions; not 'a vague indefinable appeal to the eye but . . . the spatial consonances produced by the interrelation of universally valid ratios'. The trouble is, of course, that the voice of doubt has been heard from the later Renaissance onwards, the voice that John Donne heard in the first decade of the seventeenth century:

> And new Philosophy calls all in doubt.
> 'Tis all in pieces, all coherence gone,
> All just supply, and all Relation.

So we cling to the moral value of our symbols, and to their supernatural meaning; while we have so far lost confidence in their *natural* field of reference that this hardly occurs to us at all. And our art and architecture suffers in consequence. Will Mr Rykwert's 'younger generation of architects' come to our aid?

4 1a, xxxix, 8: 1a, v. 4 ad 1; 1a-2ae, xxvii. 1 ad 3; 2a-2ae, cxlv. 2.

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