

THE DISSECTION OF TRUTH: An investigation into Edward Lacy Garbett's concepts of architectural truth and purity.

Truth is content, when it comes into the world to wear our mantles, to learn our language, to conform itself as it were to our dress and fashion...it speaks with the most idiotical sort of men in the most idiotical way, and becomes all things to all men. John Smith, *Discourses*, 1673.

Society sails through the infinitude on Cloth. Thomas Carlyle, *Sartor Resartus*.

Nobody with a good car needs a justification. John Huston, *Wise Blood*.

Introduction

There can be no such thing as a truthful or honest architecture existing by itself and for itself. If one asks an architecture to be truthful, pure or honest, one is asking stone to wear our clothes. Is that right or wrong?

Truth, with reference to the inert and the inanimate, can, at most, serve as an index of the relationship between man and his environment, his buildings.

From the middle of the eighteenth century the ideas of truth, veracity, honesty and their opposites such as deception, the lie and the falsehood, started to play an increasingly important role in architecture.¹ Why was this? What were the assumptions needed for a truthful architecture? This article cannot present a picture of the development of truth in architecture as a whole. That history has been duly written by others. Instead I would like to concentrate on a small and loose affiliation of men, represented in the main by one of them. All of them reside within the fringes of the popular concerns in architectural history: wallflowers.

This article is concerned with an aspect of the theory of Edward Lacy Garbett. More specifically it deals in depth with Garbett's *A Rudimentary Treatise of the Principles of Design in Architecture as Deducible from Nature and Exemplified in the Works of the Greek and Gothic Architects*. (1850) and puts the argument put forward there within a wider historical perspective.

I shall argue that the increasing concern with truth in architecture from the eighteenth century onwards is linked to the desire for a rigorously defined external reality. That is not so exciting in itself. It is however the personal configuration of criteria within the creation of that frame of reference which makes the story interesting.

The concern with stylistic truth and purity did not precede other design strategies, such as, for example, industrial standardisation and empirically determined averages, against what Le Corbusier a century later called the threat of the arbitrary. They are parallel developments reacting to similar concerns. However, the concepts of truth and honesty -as abstractions of an external reality- were linked to a theological paradigm, which the others were not. Despite its reputation for nihilism, Modernism accepted those abstractions wholeheartedly without consciously accepting the assumptions upon which they were based. That helped to create the surreal nature of Modernism whereby so much of what was *said*, did not add up to what was *done*. As Gerald Ford and others have argued, much Modernism was a simple inversion of accepted practices. In this sense early and classic Modernism was rather a poor *intellectual* exercise when compared to the investigations of the decades after the Second World War, even if, as a formal exercise it has created real masterpieces. If issues such as truth and honesty, purity etc., became important elements in the ethics of modern design then that was because modern architecture was never freed from the residues of another world order, which, ironically, it tried to overcome. In fact those very residues became the main justification of

1. Oechslin (1983) 21-32 and Meier (1983) p. 10-15.

Modernism in its attempt to rid itself of history. What had been forgotten is that architectural truth and honesty had been conjured up to come to terms with the stylistic pluralism of the historicists. This reveals a paradox: Modernism was the product of what it wanted to destroy; it obeyed the laws of the authority it rejected. Like the rebellion of the young, it merely inverted, thereby paying homage to the cogency of the system, and, eventually becoming one of its stalwarts.

To explain Garbett's use of the words truth, purity and honesty, is to show how the translation from metaphysical to normative truth was effected and how the metaphysical assumptions went completely unquestioned. That will give us an indication as to how Modernism was possible.

WHO WAS EDWARD LACY GARBETT?

In 1850 Edward Lacy Garbett (1824-1900) published *A Rudimentary Treatise of the Principles of Design in Architecture as Deducible from Nature and Exemplified in the Works of the Greek and Gothic Architects*. The aim of the *Treatise* was to search for constants in the relationship between meaning and form in architecture and to use those constants to obtain standards of design based on the author's experience of nature and from his reading of the architectural forms of the past.

Garbett's *Treatise* enjoyed considerable success. From the time it was first published in 1850, it went through no less than nine unaltered editions; the last appearing in 1906. Despite the undoubted success of the book, it is difficult to assess Garbett's real or immediate influence on nineteenth- and twentieth-century architecture or architectural theory. Few people in England have given him the credit for a change in their own attitudes and ideas. America was more generous in this respect; Garbett was praised by seminal thinkers of the time such as Ralph Waldo Emerson, Horatio Greenough, John Welborn Root and William Le Baron Jenney. Through their mediation Garbett's ideas directly influenced the course that architectural aesthetics was to take in the surge of Modernism. Some of his attitudes even show a homological resemblance to Louis Sullivan's ideas but I have not yet been able to prove even the slightest connection.

In any case Sir Nicolaus Pevsner judges the *Treatise* to be one of *the most advanced statement[s] of architectural theory of the whole mid-nineteenth century*.² Later he adds that *it is the only book of its date in England to face fully what architectural theory ought to involve. It is in its setting of problems much more like textbooks on architectural design today than like any of the writings so far examined*.³ and again: *He is the most intelligent, the most rational, the most far-seeing of the prophets of an original style of the future*...⁴ When reading this praise from one of the most devout and dogmatic modernists, it would seem paradoxical that many of Garbett's propositions similarly anticipated the arguments used by the critics of Modernism. But then the contradiction implied in a paradox is never more than a trick of perspective.

Many of the issues which Garbett discussed in the *Treatise* were themes which have concerned historians from Charles Eastlake until the present. But Garbett's way of addressing them did not necessarily conform to the way that historians and polemicists like to divide their material into opposing *camps* involved in *battles of styles*. It is not that Garbett was a coward or indecisive in that battle, remaining on the fence when others

2. Pevsner (1972) p. 189. The quote actually goes: *These* [referring to the essays by Horatio Greenough] *are the most advanced statements of architectural theory of the whole mid-nineteenth century, except for those contained in 'Mr. Garbett's learned and able treatise'*. cf. Horatio Greenough (1947) pp. 20-22. For the sake of brevity I have paraphrased Pevsner's compliment to bring out the implication.

3. Pevsner (1972) p. 189.

4. Pevsner (1972) p. 193.

were taking sides; it is rather that he disputed the legitimacy of the border which the fence appeared to enforce. This made him too complex a figure for the dialectical approach of most histories.

In a teleological reconstruction of history justifying the rise of the modern movement, Garbett's clear prophecy of a new style of architecture based on a new style of construction, for instance, might have accorded him a more significant role in the emergence of modern architecture. The problem is however, that he failed to reject the past out of hand, nor was he able to provide a compelling model of a style for the future. In any case, most of the *Treatise* appeared to be concerned with a reappraisal of Greek and Gothic architecture. The book ends, without due preparation, with the rather sudden and unexpected recommendation to contemporary architects to abandon both the Greek temple and the English Parish Church as appropriate models for the present and to adopt instead an Italianate Renaissance style! Should Garbett then have been allowed to play a greater part in histories of the battle of styles as a devout renaissancist? No! Again, Garbett tried to avoid the problem by reformulating the question. He did not take a stand, which was thoroughly sympathetic to any historicist camp, he was not a revivalist, nor was he an eclectic in anything but an abstract philosophical sense. His recommendation to architects to adopt an Italianate style was too obviously meant as a quick, short-term solution to a problem, which he knew, would not go away so easily. To call him Italianate, or anti-Goth would be to have misunderstood his position completely. His problem was not: *Welchen Stil?* but: *what is style?* And he wanted to know that in order to know what to look for in his attempt to find a style appropriate to his sense of time and place. He did not succeed. Nevertheless he went a long way.

But the complexity of his position does not constitute the only reason he was ignored by contemporaries in England and later historians. The surfaces of his theory appear, on a first reading, to coincide seamlessly with many of Ruskin's ideas. Much of the blame for Garbett's obscurity and the difficulty of assessing his place in history must be due to the unrivalled success of Ruskin's *Seven Lamps of Architecture* which appeared a year before Garbett's *Treatise* in 1849. It is fair to say that Ruskin's book overshadowed everything within its vicinity. But to call Garbett a Ruskinite as many have done, is patently wrong. The latter's influence on Garbett was subject to many conditions as we shall see. More interesting than the question of Ruskin's influence on Garbett is the fact that Garbett's *Treatise*, together with William Whewell's extensive review of *The Seven Lamps* in *Fraser's Magazine*, represents one of the earliest and most penetrating critiques of the notions advanced by Ruskin during that period. That in itself is a good reason to take a closer look at Garbett. A similar issue is Garbett's relation to the slightly later publications of Viollet-le-Duc. The Frenchman's far more rigorous rationalism eventually won the day causing Garbett's rather more cautious and esoteric attitudes to pale in the comparison.

Although the issues talked of above, his place in history, his relevance to the Modern Movement and his relationship to two superstars on the nineteenth century architectural stage, etc. are important to my analysis of Garbett, they do not constitute my main interest in him. I like his obscurity and have no real wish to change it. My primary concern is more abstract. The urgent theme of my analysis is the relationship between society and its shell, its architectural setting. In this text I want to take Garbett as my case-history. My aim therefore, is to investigate the way that relationship was experienced by Garbett. I want to do that by tracing the assumptions and implications contained in a single question Garbett posed his readers in the opening chapter of the *Treatise*, namely:

*Whence the necessity for architecture proper?*⁵

5. *Treatise*, p. 3.

The question reformulated to hint at the context in which it was put would go something like: Why does society *need* works of Architecture as opposed to making do with *mere* buildings. This was a popular distinction at the time, which, despite its horrible and judgmental logic, persisted right up to Pevsner's introduction to his *Outline of European Architecture*.⁶ Pevsner denied the bicycle shed the right to constitute Architecture, a situation which is not only intolerable to a Dutchman but untenable within the current conceptions of architecture.

The various assumptions on which Garbett's concept of architectural value and expression was based reveal a curious personal and rather pragmatic metaphysics, which could explain how an artefact could be thought to possess moral content. In a companion article I have tried to argue that architecture was allowed such a moral content on the basis of an analogy with the concept of justice with special reference to the concept of (material or intellectual) property. Because of this analogy a building was able to participate in certain aspects of life by which it could assume an *attitude*, by proxy. For the spectator the building thus became a symbolic extension of the (material or intellectual) owner. If that interpretation is correct then Garbett's theory has to be placed within the more general developments in English utilitarianism on the one hand and the psychology of associationism on the other. In some ways it even shows some remarkably similar conclusions to Marx's materialism.

On top of that every one of Garbett's ideas is guided by an all-pervasive theological paradigm; one in which nature, as God's second book knowable through its language of symbols, was held to be purposive and rigidly structured according to a chain of being.⁷ On that basis Garbett used the question *why do we need architecture* to launch an architectural doctrine grounded on the supposition that society has not just a physical and sensual desire for beauty but that beauty constitutes a moral necessity. This dual purpose for beauty was subsequently polarised, creating a spectrum of values arranged according to a chain of beauty; a scale of architectural worth, differentiating the aesthetic priorities of each design dilemma. At the lowest and most fundamental level Garbett demanded that a building be polite and benevolent in its *attitude* to its surroundings and conciliatory to its onlookers. With each anabatic step in the chain, the emotive possibilities grew, a building could become more and more *refined and noble*, eventually achieving architecture's *highest* aim which was to be poetic and didactic; endowing time and space with both national and temporal identities.

A highly original idea of his, strongly reminiscent of Schopenhauer's metaphysics, was that Architecture should be considered an *inherent evil* forced on a meek and powerless environment. Aesthetic concern to invert this evil into a positive and beneficial good to society was no mere luxurious indulgence but became a social imperative. To improve society one needed, among other things, to improve it's shell and to control that shell's language so that it would be allowed to confirm, enhance and guide the process of civilisation.

This program involved Garbett in a philosophical odyssey which started with the recognition of the need to find an adequate normative definition of *good architecture* founded on an organic conception of the Vitruvian triad *Firmitas, Utilitas* and *Venustas*. Not only did Garbett insist that these three *conditions for good architecture* were completely interdependent, but he even went so far as to insist that the one was really no more than a special case of the other.

6. Pevsner (1981) p. 15. Pevsner's use of this archaic distinction shows his thinking and that of many modernists to have been firmly rooted in the nineteenth century. Kostof in his *History of Architecture, Settings and Rituals*, (1985) finally rubbished that distinction irrevocably in the first chapter.

7. e.g. *Treatise*, p. 8.

Such conceptual interpenetration was achieved in two steps. Firstly, Garbett adopted a residue of medieval scholasticism whereby beauty, through its abstraction to- and identification with, perfection became a meta-quality which in turn was able to represent all the *virtues* architecture could contain and express. This definition of beauty could then follow out its implications to formulate a number of precepts according to an epistemological framework derived from contemporary physiology.

The second step, already implicit in the first, was achieved by extending the traditional boundaries of Functionalism. Classic Functionalism extrapolated a sense of beauty from the appropriateness of an object's form with regard to the mechanical functions allowing that object to perform efficiently. Garbett felt that this excluded the broader social purposes and obligations of architecture. He therefore extended the conceptual reach of Functionalism to include the moral and psychological functions of an object's experience.⁸ For example, the column was only so beautiful if it confined itself to supporting the roof. It could be considered far more beautiful if it was able to provide adequate compensation for interrupting the environment by becoming a symbol of the owner's benevolence towards his surroundings. It became even more beautiful, indeed poetic, if the column was able to give expression the wider implications of that act of support, by, for example, confirming the order of nature or of nation and glorifying a divine purpose. In other words Garbett submitted architecture to the various levels of meaning embedded in the Bible interpretation industry ranging from the literal to anagogical.

The possibility for that extension of Functionalism was directly derived from the behaviour of the concepts of *use* and *purpose* in English eighteenth- and nineteenth century ethical thought. This allowed Garbett to consider beauty a purpose as basic to architecture as, say, structural excellence. The idea of beauty being nothing more than perfection meant that the beauty of a building was dependent both on its structural excellence as well as its usefulness to owner and society as a whole. By extending usefulness to include expression and beauty, the outward appearance and setting of architecture became an issue as basic to society as construction and planning was to the owner. This hybrid body of ideas ultimately served to politicise and engage the object of art, more especially the object of architecture, into social and political discourse.

Garbett's place in an intellectual tradition

Garbett was an eclectic thinker, every one of his ideas participates in a complex web of connections. In its deliberate critique of other thinkers the *Treatise* is as much an essay as a compendium. Many of the ideas he discusses derive from books by persons who have remained on the sidelines of contemporary architectural and intellectual historiography.

His *Treatise* represents a knot, which ties together a number of architectural doctrines from the eighteenth- and early nineteenth centuries, incorporating the undercurrents from the relevant developments in many other disciplines such as moral philosophy, science and theology. Garbett's explicit reliance on those sources makes him an interesting case-study in the investigation of intellectual cross-pollination during the first half of the nineteenth century. In fact, Garbett's definition of architecture derives to a large extent from what I have identified as a loose grouping of architectural thinkers who have not been given adequate historical attention. This group includes figures such as John Robison (1739-1805), Samuel Ware (1781-1860) Alfred Bartholomew (1801-1845) as well as others such as the better known Robert Willis all of whom acknowledged a profound influence of German, French and Italian theorists of the eighteenth and nineteenth centuries.

Despite the fact that the authors just listed are mentioned together in a number of works on architectural theory of the period; and despite the fact that they were highly

8. cf. Colin St John Wilson (1992) pp. 20 ff. for a similar attempt to extend the concept of Functionalism.

regarded during their time, they seem to have been lost to recent histories of the period, forgotten in lieu of the traditional frame of reference of architectural history. Their place in English architectural history must however be re-examined. They represent part of what may, in the broadest sense, be identified as a "movement". That movement concerned itself with the concept of style and its relation to structural and organisational issues.

The identification of style with structure is traditionally thought to have prepared the ground for Modernism. Far from being a conceptual break with the past, Modernism was born out of the theoretical attitudes formed during the nineteenth century. There is nothing new in those two assertions. What this article hopes to show however, is firstly that the figures just listed, including Garbett, played a far more significant role in that development than has hitherto been credited to them, and secondly that the rationale of Modernism as it was being prepared in the nineteenth century was far from straightforward. Much of it rested on assumptions that look very uncomfortable when analysed using the critical apparatus of post Modernism.⁹

It is time to devote a study to Garbett as a person. That is not easy. Edward Lacy Garbett is an obscure figure. Even in the relatively small world of nineteenth-century architectural history he is remembered only on account of a single, small octavo book with a long title and few illustrations. It is only because of this book that his name occasionally crops up in the various histories of nineteenth-century architecture. More often than not he is mentioned rather perfunctorily, crowded together with other historical wall-flowers in a single often dismissive sentence or paragraph. To make matters worse his identity has been consistently confused with his father, his grandfather as well as with an over-zealous preacher of the same name. Whether his historical status is justified or not does not concern me; as I said earlier, I like his obscurity.

The primary objective of the book of which this article is fragment must be to reconstruct his thought for its own sake and to evaluate its practical use to architecture. The book must be seen as an *act of understanding* of his mind, or at least an attempt at such an understanding. Some of the ideas Garbett introduces or adapts from others, deserve to be excavated and re-evaluated with regard to their possible relevance to contemporary design problems. These include, of course, his argument for the need for an architectural etiquette encapsulated in the concept of the polite and the poetic. They also include his refinements of the concept of architectural style as well as his lively and occasionally brilliant analysis of Greek and Gothic architecture. In the end all these issues were just part of Garbett's larger scheme which was to relate the purpose of art and architecture to the purpose of society as a whole.

The end of Garbett

Eventually Garbett's intellectual eclecticism reciprocated and drew back on itself. In the *Treatise* he had taken from every possible intellectual discipline, processed the ideas attached to each by way of sophisticated analogies and applying them to architecture. As a result his architectural theory, right from the start, was being prepared to be transformed back into something more general, something larger: a complete and more generalised view of the world as a whole. It is an epic cycle. He took from all sorts of disciplines to formulate his thoughts on architecture and then used those thoughts to formulate solutions to more general problems: a complete reciprocation.

The *Treatise* already contains indications of this development. His basic concerns to improve society would eventually spill over from architecture into every discipline he initially brought to bear on his architectural theory, including optics, geology, astronomy

9. This conclusion with regard to the more recent pioneers of Modernism was put forward by Banham (1972) pp. 320 ff.

and biology. Architectural theory provided the basis but was ultimately not sufficient to satisfy his drive to propound and impose. He spent most of his mature years on exercises in biblical exegesis and the construction of tortuous utopias. His thinking piled itself up, remaining largely unchanged. In the end his strong and inflexible opinions would squash most of his early perspicuity. If he began as an architectural theorist, he ended as prophet or even a self-proclaimed messiah. But even when Garbett came to the end of his journey towards self-apotheosis, one can still sense the preoccupations that dominated his architectural thinking just as one can sense the bitterness about a career which looks, to all intents and purposes, as if it had never really taken off. The *Treatise* represents the fountain-head of a progressively mystical and contorted philosophy which tried to syncretise a bricolage of different beliefs increasingly coloured by personal grudges and loneliness.

He ended his life in Baku, Azerbaijan, presumably preparing, or returning from a mission to Ararat to convince the world of its momentous mistake in rejecting God in favour of his shadow: theism for atheism; genesis for evolution. Like some before and many after him, he was going to prove that the Flood and Noah's Ark were literal truths, not just backed by the Bible, but by science. He was fully convinced that his explanation of events would be enough to bring this mad world to order.¹⁰

The source for this gruelling recipe of interests is contained within his architectural theory. Here Garbett first tried to systematise aesthetic judgement into rules for conduct.

THE IDEA OF TRUTH: TRUTH AS A WAY OF TALKING

The dilemma of style introduced by figures such as Horace Walpole during the middle years of the eighteenth century, sublimated the concept of truth so that it came to designate a formal consistency, categorising national and temporal identities. There was Englishness and Frenchness, manners and styles. In calling them *true* they claimed an absolute existence for these styles which thus became *types*. Truth, in this sense, really meant type. Because of the process cell division called historical differentiation, the choice in available historical styles, and therefore of types, increased dramatically during the nineteenth century. This led to a problem. The profusion of officially recognised types prevented the nineteenth century from seeing their own type. It had become submerged. Within this atmosphere the continuous redefinition of style in the face of this onslaught of styles became an increasingly important process in the formulation of design norms and justifications. The word style became the focus of architectural discourse, the *tyrant of the hour*, the medium towards the new.

Style was something you had to own. Modernism erupted from this obsessive concern with the ownership of style. Modernism, as Reyner Banham has shown, was to a large extent a formal creation, a creation of forms abstracted from a wide diversity of deeper concerns. A number of theorists in the nineteenth century, the cauldron in which a desire for the modern in terms of an ownable style became so traumatic, believed the concept of style (which they had only just invented) to have been already hollowed out by the emphasis on surface treatment and the use of ornament. For some reason clothing structure had become less and less acceptable as a theoretical stand, which then had to be *compromised* in practice. In the profusion of possible styles, "they" felt there to be a lack of style. In the profusion of possible surfaces, the supposed lack of substance became acute. That was the cliché.

In fact the surface had become the substance, but they were not going to admit that. It was felt that the historical styles were being subjected to gross trivialisation by being badly applied. Truth became *the authentic*. The styles of the past simply did not

10. I refer the reader to Edmund Gosse's *Father and Son*, (1907) for a remarkably similar obsession.

belong in the nineteenth century. Truth as the authentic became the complement to a separate and owned identity. Some architects took this a step further and were not satisfied with the fact that the forms pertaining to each style were being categorised only according to time, place and social function. They wanted these forms related to causal principles, such as structure or culture, that is, as Kostof formulated it so eloquently, technology in the service of vision.

Reading through the architectural theories of the eighteenth and nineteenth centuries which were concerned with this reduction of truth to *cause*, and which Nietzsche identified as the cult of origin culminating in his century, one gets the general impression that architectural truth was primarily defined by the individual theorist's loyalty to a theory, a causal principle he had isolated with regard to a particular style, and very little beyond that.¹¹ No cynicism is intended here, loyalty to that causal principle was paramount: it provided normative discourse with a measure of consistency. The word truth as it appeared when theorists were talking about causes, really stood for *loyalty to a cause*. Loyalty to a cause discourages hybridisation and discourages relativity. The concept of architectural purity was born out of loyalty to an account of architectural origins.

Each theorist, therefore, was in a position to define his own purities. Even hybridisation could be made pure if it was seen as a super-factional syncretic ideal. That was the case with Eclecticism. Eclecticism tried to institute its own purities by collating the impure and unifying it into a system. It never managed to succeed fully, always having to defend itself against the charge of being a *mixed* style. The hybridisation of styles could be considered wrong as long as some form of national or temporal, functional or structural *purity* could be presupposed. This was made all the more easy with the truth which stood for structural cause.

In the end truth really stood for persuasion. A truthful architecture convinces on the basis of premises shared between the maker and the beholder. For the last two hundred years theorists have been able to convince the general public that a truthful or honest architecture is philosophically possible. It is a remarkable feat of logical coercion.

Garbett truly believed that those shared premises indicated a universal and timeless validity. For him truth was something tangible, existing outside the mind like absolute forms. Garbett's concept of truth in architecture was the product of his view of the world as a rigid, complex structure, which could be overcome and standardised by the refinement of language. An optimism his intellectual climate had inherited from Locke. Truths represented values, which made possible a natural and permanent language of nature applicable to architecture. Truth represented a corpus of assumptions relating the owner to the perceiving subject through the artefact. This implies that the concepts of truth and purity in architecture were further affected by the psychology of associationism. This is indeed so: truth in architecture consisted in a building's ability and skill to make the perceiver follow the *intended* direction of a particular train of thought. The idea was that that train of thought could be controlled by the forms and the setting of the building. There were predetermined feminine forms, masculine forms, forms of anger and delicacy. As such, truth in architecture has to be understood as one of the implications thrown up by the concept of character and working itself out.

Truths I: Truth of character

Garbett's text reveals three basic variations in the use of the word truth. The first idea conforms to the idea of honesty, integrity or sincerity. Truth in this context is merely a question of veracity. An architectural assertion such as a wall proclaiming that *it is made of*

¹¹ Cf. Nietzsche, *Beyond Good and Evil*.

marble, must, in order to be truthful, be made of marble. True art should not try to deceive. The notion that art was essentially illusionistic was rejected by Garbett who once again let Reynolds speak for him:

*Connected with the error that imitative art consists in the imitation of what is commonly called nature, i.e. of particular or individual nature, is also the most destructive notion that its perfection is to "deceive the eye"*¹²

The whole truth-debate may be seen as part of a Platonic urge in Garbett's aesthetics with its hostility to mechanical copyism. It is not surprising therefore that Garbett was quite happy to follow Ruskin on the subject of veracity as set down in the "Lamp of Truth".¹³ Garbett rehearsed all of the former's well-known arguments about gilding, marbling etc., demanding that the material should not be asked to sacrifice its own character to appear too much like something it is not.¹⁴

Garbett, however, departed from Ruskin's authority with regard to the application of *natural* forms in architecture. This was primarily because Garbett's principle of imitative generalisation and exaggeration got in the way. *No one thing in nature, Garbett wrote, is natural enough for decorative use.*¹⁵

This paradox is resolved by the identification of the word *natural* with the generic rather than the specific, supported by the Platonic directive that architecture *must not copy a natural form, but a natural idea.*¹⁶ The use of flowers as direct models for architectural ornament, without an antecedent process of generalisation was thus made into a taboo not unlike the second commandment.¹⁷ It was however, precisely this process of generalisation and exaggeration which was ridiculed by Ruskin in his Lectures at Edinburgh and in his *Stones of Venice* when he describes what the Greeks would have done with the creation had they themselves been their gods.

Garbett meekly returns to Ruskin's sphere of influence when the problem of veracity starts interfering with the demand for architectural politeness, which subsequently realigns itself as a moral criterion with Ruskin's desire for sacrifice with regard to buildings. It could not be considered a lie to turn one's best side outward. To do so was in fact an important part of the courtesy of building. Having said that it was important to do so honestly: *...to proclaim at the same time 'This is my best side.' (...) If you cannot beautify without deceiving do not beautify at all. Rudeness is better than a lie.*¹⁸

An honest architecture could conceal if it so wished; it was not bound to exhibit construction. But in hiding, it had to avoid deception. The first is merely a question of reticence; the second was a question of pretence.

Decoration was particularly sensitive to pretence: gilding on wood was acceptable. The spectator knew that gilded wood could never look like real solid gold. But gilded iron, on the other hand, was considered deceptive. Gilded iron was judged to resemble gold too closely, and could be accused of trying to defraud our system of value as based on supply-, or rather scarcity and demand. Both Ruskin and Garbett were heavily

1. *Treatise*, p. 122. On the Platonic residues in this statement compare Beardsley (1975) pp. 36-38.

2. *...though falling into many dangerous fallacies, [Ruskin] has truly treated on this subject. Treatise*, p. 124.

3. Ruskin's position with regard to truth and deception in architecture is contained in his *Lamp of Truth*. For an historical and critical treatment of Ruskin's concept of truth see Ball (1972) Chapter 2: 'Ruskin and "The Pure Fact"' and more generally Garrigan (1973) and Landow (1972).

4. *Treatise*, p. 128.

5. *Ibidem*.

6. *Exodus*, 20,4: *Thou shalt not make unto thee a graven image, nor the likeness of any form that is in heaven above or that is in the earth beneath etc.*

7. *Treatise*, p. 126.

influenced by Alison with regard to the problem of deception. Alison had argued that the discovery of pretence in an object causes disappointment. This disappointment was caused by the realisation that the object was in fact unfit or unworthy of exhibiting the character of the thing it pretended to be.¹⁹

Garbett adopted this reason wholeheartedly, as well as the morality behind it. Deception in architecture was morally wrong: it opened the values of society up to inflation.

Deception therefore became the basest purpose of art: a form of prostitution. Rising to his pulpit Garbett chanted that it was as if a man who had learnt writing in order to write sermons, should employ his skill in committing forgery.²⁰ True art did not consist in manual dexterity, or in illusionistic effects: *The object of all real art, as of all science, is to elicit truth.*²¹ In other words, art is, or should be, like science and philosophy, another probe in the analysis and reconstruction of reality. Art forces man to withstand a further stage in the test distinguishing the artificial from the real.²²

Truths II: Useful truth

A second use of the word truth in Garbett's *Treatise* refers, quite simply, to a higher reality and requires the theorist to project an ideal. This type of truth served a pragmatic purpose in that everything which was considered useful or beneficial was also *true*. This form of truth was used in the *Treatise* as an adjective for all Garbett's irreducible likes and dislikes. Everything that Garbett considered good and beautiful he used as axioms on which his principles could construct themselves. Nature, as the *living garment of God*, also derived its authority from this type of intuitively held truth. Truth here refers to a paradigm based on an immediate and opaque authority usually in the form of a personal desire to have things so, subsequently disguised by words such as *natural*.²³ Despite Garbett's elaborate reference to science and the teleological construction of his histories, his truths referred, just as often, to his own personal beliefs. Truths of this sort represent values connected with tradition and the concept of permanence, but have a very unstable character.

Truths III: Truth by dissection: THE VITRUVIAN TRIAD

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8. *Treatise*, p. 71.; *It is possible, for instance, [Alison] proceeds, to imitate the winding of the ivy, the tendrils of the vine, or the beautiful curves of the rose-tree, in iron or in any other metal. It is possible, also, to colour such imitations in so perfect a manner as at first to deceive the spectator. If I am not mistaken, however, the moment we are undeceived, -the moment we know that the subject is so different from that which characterises such forms in real nature, the beauty of the forms is destroyed, and instead of that pleasing sentiment of tenderness which the delicacy of the vegetables excites, a sentiment of disappointment and uneasiness succeeds; of disappointment, from the absence of that delicacy which we generally infer from the appearance of such forms; and of uneasiness, from the conviction of force having been applied to twist the subject into so unnatural directions.* Alison (1825) chap iv, sect. 1. part 2.
 9. *Treatise*, p. 122.
 10. *Treatise*, p. 123.
 11. Alan Turing devised a test to distinguish artificial intelligence from natural intelligence which consisted of an endless series of random questions. The longer the computer was able to disguise its artificiality, the closer it approximated a natural intelligence. The object of computer technology is to ultimately to wipe out the difference between real and artificial intelligence, so as to be able to establish the difference between computer and man on another basis. Alan Turing's test is useful as an allegory of the development of culture in relation to nature, or architecture in relation to nature and the process of its humanisation.
 12. To illustrate what I mean I have the following anecdote. I was watching children's television during the autumn of 1993. A short bulletin in the *Jeugdjournaal* (children's news bulletin) concerned the pollarding of willow-trees. The journalist interviewing the man doing the job, asked jokingly, *is such a haircut subject to fashions, is this one for example*, pointing to the bald willow behind the man which had just a few sprouting branches left on its head, *a bit punky?* *No*, replied the man decisively, *it is a natural haircut*. The man and the journalist, fully appreciating the joke, both appeared oblivious to the irony.

Well-read men are obsessed with Politeness. Elias Canetti, *Auto da Fe*.

Evil only upsets people now and then, but the visible signs of evil hurt them from morning until night. Diderot, *Rameau's Nephew*.

The central problem of Garbett's *Treatise* is contained in one question:

*...whence the necessity of architecture proper?*²⁴

This question forces the confrontation between a society and its architectural setting. As a consequence the subject of architectural theory becomes politically involved at this point. But answers to questions like the one just quoted are invariably unstable and their value always relative. They cause discourse to become permeated with contemporary and personal beliefs and preoccupations. Similarly, when asking his reader to consider the question why society needs architecture, Garbett was just as concerned with removing the interference of effete explanations concerning the nature and purpose of architecture as providing new ones:

*Observe it will be no answer to say, that it is man's nature not to be satisfied with the supply of necessities, but to seek luxury, and to admire the beautiful. That will not do.*²⁵

Man's nature, qualified in Garbett's vocabulary to stand for an irreducible and instinctive lust for luxury, is can no longer satisfy as an explanation for society's need for architecture. The concept of human nature had now to be further qualified to complete explanation. To do this one had to answer the very questions the concept of human nature begs: Why is man not satisfied with the supply of necessities, why does man admire the beautiful? and especially: why does he appear to need beauty? Those questions now had to be answered.

On a very general level, the rules of explanation had been altered in the nineteenth century. This was in great part due to the rise of popular science. Recent developments in physiology and psychology were able to take the process of explanation a step further and Garbett wanted to make full use of these opportunities.

In an investigation of Garbett's *truthful architecture* we must start off with an inquiry into Garbett's definition of architecture, investigating the semantic oppositions erected to contrast architecture with its social opposite: *mere building*. This will show us what exactly Garbett wanted society to need. To analyse Garbett's concept of architecture we have to look carefully at each of the three elements of the Vitruvian Triumvirate, *Firmitas, Utilitas and Venustas*. This will show us the role played by the concept of structure and utility -the use of use- in Garbett's definition.

The definition of architecture

When we begin to analyse the question: *Whence the necessity of architecture proper*, we have to take account of the assumptions upon which Garbett's view of the world rests. The questions begs clarification on two points: a. What does Garbett mean with the word architecture? The answer to that will describe an icon, which will serve as the foundation of all his prescriptions to architects. The second question, b., is related to the first, but focuses on the word necessity: What are the premises which apparently make architecture a social imperative?

Definitions of the word architecture are generally normative and prescriptive; they set up an icon of the good which is the first step of a program in which specific actions are deducible from the premises contained within that definition.²⁶ A definition of

13. *Treatise*, p. 3.

14. *Treatise*, p. 3.

15. van Leeuwen (1982) pp. 1-7.

architecture therefore relates theory to practice by way of intentions and attitude. These intentions are not always the result of a discursive and consistent logic where things would add up without reference to the social, religious, political and philosophical circumstances in which the definition arose. Every definition is in that sense a dogma, its constitutive elements are made to add up by violence. In order to answer his own question therefore, Garbett had to provide a definition of architecture, which would at least prepare for its social necessity. I would like to argue that such a lead was provided by Garbett's organic conception of architecture.

The quotation introducing the *Treatise's* first chapter entitled: "Definition of architecture - its necessity, uses and requirements," is Sir Henry Wotton's well-known paraphrase of Vitruvius: *Well building*, writes Wotton, *hath three conditions; Commodity, Firmness and Delight.*²⁷

That is also Garbett's point of departure: *Architecture*, the latter writes, *is the art of well building; in other words, of giving to a building all the perfection of which it is capable. This differs in no respect from another definition lately put forth, 'the art of the beautiful in building;' for those who have undertaken to investigate the abstract nature of beauty, appear not to have arrived at any more definite conclusion than that it consists in perfection of any kind; so that, whether we speak of the beauties of a building, or its perfections, we mean the same thing. The term beauty is often restricted, in architecture, to those merits of a building which are not necessary to its use, or its mechanical perfection; and hence the classification of the aims of architecture under three heads- Fitness, Stability, and Beauty. Nothing can be called architecture which does not aim professedly at all these three objects...if there be any structure which professes to embody only two of these requirements (no matter which two), that is not architecture at all.*²⁸

The one condition needed to make architecture even possible, Garbett argues, is that Vitruvius' *Firmitas*, *Utilitas* and *Venustas* be seen as strictly interdependent. Each element in his definition is regarded as no more than a special case of the other. That correlation is made possible through the use of the idea of perfections. Perfection is here used as a meta-quality by which each one of the three conditions of good building can be *translated* into the other.²⁹ Perfections, when made synonymous with beauty, as it had been in the middle ages in the slogan *Pulchrum et perfectum idem est*, would be able to lift beauty into the sphere of social imperatives by being applicable to the other two conditions of good architecture.

Architecture and the argument of design

Garbett's use of the words *purpose*, *design* and *perfection* is closely dependent on Christian logic. His concept of good architecture, with its insistence on *perfections*, its *revelation of design* and its emphatic deliberation of *purpose*, invokes the concept of deity. The words *design* and *purpose*, relate Garbett's architectural theory to theology, more specifically to natural theology.

Natural theology has been appropriately defined as the reasoned account of natural religion. Natural religion is defined as *man's conscious recognition of purposive intelligence in the universe of things, similar to that exercised by himself.*³⁰ Natural theology

16. Henry Wotton (1624) Part I. cf. Vitruvius: *Haec autem ita fieri debent, ut habeatur ratio firmitatis, utilitatis, venustatis.* Granger ed. I, iii, 2.

17. *Treatise*, p. 1.

18. The notion that beauty constitutes perfection can be traced back to Greek philosophy where ethics and aesthetics were combined in the concept of beauty, where beauty made up part of yet another philosophical trinity: Beauty, Goodness and Truth; beauty being the signature of truth and therefore good. The actual synonymy of beauty and perfection can be traced to the Medieval *Pulchrum et perfectum idem est*. W. Tatarkiewicz (1980). I have also consulted John Passmore (1970).

19. Clement C.J. Webb (1970) p.1, quoting a letter from Dr. Henry Wilde.

argues -and generally accepts- the existence of God, not in the first place through Revelation, but as a hypothesis required by reason and logical extension. It sets out to prove the existence of God by virtue of the argument of design. Design and the presence of a designer, can only be assumed on the basis of an analogy with human industry. But natural theology is not just a reasoned account of religion, it is an account of experience generally. The theologian expresses wonderment at the intricacy and obvious purposiveness of nature and on that basis expresses a need for God as nature's primary postulate to explain his experience of nature.

Garbett's specified intention was to base the precepts for architectural design on an analogy to *nature*: the *second* book of God. It is not for nothing that Garbett talks of nature as God's language of symbols.³¹ He is implicitly forced to take God's existence as a given because it is only the concept of God that can imbue nature with purpose. On that basis Garbett is able to distil a course of architectural action from his experience of nature. Garbett's *Treatise* is therefore related to natural theology in that it emphatically recognises the purposive character of nature. Garbett provides what is essentially a reasoned account of architecture's complete dependence on the phenomenological laws of nature. The *Treatise* is the architectural equivalent of Paley's *Natural Theology*, proving the existence of architectural principles, that is, the existence of absolute standards for architecture on the basis of analogy between the creativity of God and the creativity of man. Where Paley needed the evidence of human design to provide an analogy to prove divine providence. Garbett uses divine providence to justify the existence of architectural principles. Those absolute standards are represented by the concept of perfection.

Perfectibility

Perfections, with which Garbett completes the concept of architecture, are superlatives which project their object beyond experience. In Judeo-Christian theology, especially as it was infected by Platonic and Neo-Platonic thought, perfection stands for God. Again, the logical basis for the consigning of certain attributes to deity lies in the analogy between the concept of God and the (human) experience of his product: nature. Garbett's definition of good architecture uses a very similar model to project imaginable superlatives to which architecture must strive. Those superlatives are only possible on the condition that the Platonic/Neo-Platonic conception of the world is a truth, i.e. that perfection is possible.

Having used the words *purpose*, *design* and *perfection* in his definition of well-building, Garbett makes the word architecture stand for the product of a providential activity. *Good* architecture expresses a desire for purpose and demands a proof of that purpose in appearance. The word design then, which is another word for purpose, consciously relates each of the three conditions of well-building to each other through its assumption of intentionality. The definition of architecture therefore must cover all possible purposes and must remove architecture from the separating activity, which would have it reduced to *mere decoration*.

The correlation between the three necessary conditions for well-building is a continuation of the organicism hinted at in Garbett's preface. That organicism had as its main objective the demonstration of the connection between beauty and use or beauty and purpose, a theme which Ralph Waldo Emerson had already elaborated in his *Essay on Art*:

Art, writes Emerson in a critical spirit, makes the same effort which a sensual prosperity makes; namely to detach the beautiful from the useful, to do up the work as unavoidable, and,

20. cf. *Treatise*, p. 8.

hating it, pass onto enjoyment. These solaces and compensations, this division of beauty from use, the laws of nature do not permit. (...) The art that thus separates itself is thus separated.³²

The Kantian desire to separate beauty from use, that is from interest, could, if taken out of its Kantian context, imply a trivialisation of beauty into something optional and luxurious. It tends to separate from content. To counter this trivialisation Garbett, who will have had only the most superficial knowledge of Kant if at all, had to join the growing clamour in the world of architectural theory, which actively opposed the insidious act of separation which divided architecture from building.

Architecture versus building and useless versus useful

The problem with Ruskin's *Seven Lamps of Architecture*, as far as Garbett was concerned was precisely the attempt to sever beauty from use by trying to distinguish architecture from building. Their separate and contrasted existence would instigate the destruction of architecture.

Ruskin's justification for making the distinction between architecture and building in the opening lines to "The Lamp of Sacrifice" does not even attempt to hide the underlying motives.³³ By themselves the two words -architecture and building- already differ sufficiently for there to be no real reason to insist on an emphatic hierarchy of meaning. Even so, Ruskin forces them into *différance* for the sake of his program.³⁴ He needs two forms of architecture, a greater and a lesser. That is why he sets architecture and building up as supplementary opposites. First he brings the words together by pointing out their semantic vicinity. Then he separates the two words again after contaminating each with a value relative to the other. Ruskin is a particularly good example of Nietzsche's evaluator, he practices a Machiavellian linguistics in which the motto is: distinguish and rule.³⁵

The key word in Ruskin's definition of architecture, and therefore in his distinction between architecture and building is *fine*. Architecture proper, writes Ruskin,

21. Emerson (1883) p. 81.

22. *It is very necessary, he writes, in the outset of all inquiry, to distinguish carefully between Architecture and Building. To build, -literally to confirm,- is by common understanding to put together and adjust the several pieces of any edifice or receptacle of a considerable size. Thus we have church building, ship building, and coach building (...) but building does not become architecture merely by the stability of what it erects; and it is no more architecture which raises a church, or which fits it to receive and contain with comfort a required number of persons occupied in certain religious offices, than it is architecture which makes a carriage commodious, or a ship swift. I do not, of course, mean that the word is not often, or even may not be legitimately, applied in such a sense (as we speak of naval architecture); but in that sense architecture ceases to be one of the fine arts, and it is therefore better not to run the risk, by loose nomenclature, of the confusion which would arise, and has often arisen, from extending principles which belong altogether to building, into the sphere of architecture proper. Let us therefore, at once confine the name to that art which, taking up and admitting, as conditions of its working, the necessities and common uses of the building, impresses on its form certain characters venerable or beautiful, but otherwise unnecessary. Thus, I suppose, no one would call the laws architectural which determine the height of a breastwork or the position of a bastion. But if to the stone facing of that bastion be added an unnecessary feature, as a cable moulding, that is architecture. It would be similarly unreasonable to call battlements or machicolations architectural features, so long as they consist only of an advanced gallery supported on projected masses, with open intervals beneath for offence. But if these projecting masses be carved beneath into round courses, which are useless, and if the headings of the intervals be arched and trefoiled, which is useless, that is Architecture. It may not be always easy to draw the line so sharply, because there are few buildings which have not some pretence or colour of being architectural; neither can there be any architecture which is not based on building, nor any good architecture which is not based on good building; but it is perfectly easy, and very necessary, to keep the ideas distinct, and to understand fully that Architecture concerns itself only with those characters of an edifice which are above and beyond its common use. J. Ruskin, *Seven Lamps*, pp. 31-32)*

23. Derrida (1981) especially Barbara Johnson's useful introduction p. viii ff.

24. Nietzsche (1969) p. 85.

must not be allowed to squander, by *loose nomenclature*, its status as a *fine art*. The distinction between fine-arts and arts, between arts and crafts is primarily a social division, its philosophical division is instituted at the desire for arts to separate itself. Ruskin's definition of architecture is shaped by the wish to avoid the criss-crossing of social strata's.³⁶

Ruskin uses the word *uselessness* to describe the added feature which distinguishes architecture from building. He does not, of course, really mean uselessness. He wishes to use the word *useless* to indicate a certain refinement of *usefulness*. It is an aristocratic *uselessness* he alludes to, a *fine* *uselessness*, a use which confines itself to *higher* preoccupations similar to Kant's concept of *dis-interest*. Plain *usefulness*, in Ruskin's dictionary, has all to do with sweat and physical labour. The hierarchy of values by which *usefulness* is graded and described is crowned by the negation of itself: the highest form of use is *uselessness*, that is an intellectual and moral transcendence. Ruskin's attempt to tie down the meaning of architecture more precisely is intended to exclude from the word's circumference what Garbett was later to describe as the *lower beauties of architecture*. The word *Architecture* had to be kept free from any undesirable social contamination.

The distinction between building and architecture was instituted at around the same time as architecture was undergoing a process of professionalisation. For many architects the distinction between architecture and building was motivated by social or professional ambitions. Architects wanted to be associated with a particular sort of *intellectual* activity, not so much with the groundwork. Ruskin's distinction between architecture and building fortuitously overlapped with the social concerns of architects. Even so, his distinction between architecture and building was more immediately concerned with establishing an icon of architecture modelled on the metaphysical hierarchies of Platonism and related Christian thinking. Ruskin wanted to stress architecture's intellectual "higher" status. Art was concerned exclusively with beauty, and beauty, to the Platonic man is an independent quality, absolute, irreducible, divine and isolated: a static form, well removed from the hustle and bustle of everyday life, where beauty had been expressly forbidden.³⁷

The organic interdependence of the Vitruvian triad, making beauty dependent on what Ruskin had just rejected as building, would thus be a disintegrating influence on that sense of absolute beauty. Such an approach to architecture would make architectural beauty a relative value and destroy the Platonic ideal to which we know Ruskin subscribed.

Garbett's insistence on the interdependence of Wotton's or rather Vitruvius' three conditions of well-building, leads him to reject the polarising tendencies of his age:

The distinction between architecture and building is a distinction of very recent origin; for it is an idea quite peculiar to the present age, and nearly confined to the English nation, that building may be unarchitectural. Never, till very lately, was the notion entertained of erecting buildings professedly with no design beyond convenience and stability. I say professedly, because a very slight examination will, in most cases, detect the complete hollowness of this profession, and will beget a doubt whether, in any case, the pursuit of these two ends alone, to the exclusion of every other, is really possible in the nature of man. Without pretending, however, to decide whether this is possible or not, we may observe that the mere proposal of it necessarily removes the design in which it is proposed entirely out of the province of architecture; and thus it happens that we have at present in England (what was never thought of before or elsewhere) a large amount of building which is not architecture, or at least pretends not to be so. As many profess then to build "without any attempt at architecture," there has hence arisen a habit of restricting the term Architecture

25. Ruskin's desire to have everyone socially clearly stratified and recognisable in their status, is well known. cf. for example *Praeterita*, Vol. i, Chapter 1

26. Ruskin, *Seven Lamps*, "Lamp of Beauty," § XXI

to that which they do not attempt, viz., to those objects of well building which are not included in or essential to use and stability. Now, this is a most pernicious habit, calculated to lower while it affects to raise the sphere of the art; tending, in fact, to reduce it...to decoration, and its professors to mere decorators. The art which engrossed great part of the attention of a Phidias, a Michael Angelo, and a Wren, and the whole mind of a Palladio, is something more than decoration.³⁸

The passage anticipates, and to some extent exposes, the logical problems that Pevsner would later get into when, following Ruskin, he wanted to divide architecture and building along a line vaguely intersecting the connection between Lincoln Cathedral and the sadly unwanted bicycle shed.³⁹ It is not that Garbett wants to do away with such hierarchies. To put a bicycle shed on the same level as Lincoln Cathedral would have been a provocation also to him. Garbett was certainly not less of a snob, if snob is the right word, than Ruskin or Pevsner.

Structure and genesis: John Robison and Alfred Bartholomew

In order to prove the use of beauty, the whole concept of architecture had to be reconsidered so that the aesthetics of architecture could be seen to be based on qualities that were integrated in the whole substance of the building rather than those merely grazing its surface.

Garbett was certainly not the first to attempt this. The division between architecture and engineering had become a progressively complicated issue during the nineteenth century. This was largely due to the tortuous attempts to justify that division conceptually. As the gap between the two disciplines widened, a small number of theorists became aware of the dangers inherent in such a division. They argued that although the architects had initiated their own isolation, they themselves were ultimately going to be the worse off for it. This line of normative thought, through three successive generations was represented by Samuel Ware, Alfred Bartholomew and Edward Lacy Garbett. One thing they had in common was their enthusiasm for the writings of John Robison, the Scottish professor of mechanics and the author of an impressive series of articles on mechanical engineering and architecture for the 3rd edition of the *Encyclopedia Britannica*.⁴⁰

Robison had formulated the idea that structure was the originating and providential principle of every aspect of architecture, including the aesthetics of architectural form. He may well have arrived at this formula through indirect knowledge of Carlo Lodoli, either via the engineer Robert Mylne or Giovanni Poleni.⁴¹ He will also

27. *Treatise*, p. 1-2.

28. Both Ruskin's definition and Pevsner were recently juxtaposed in Hyman and Trachtenberg (1986) p. 41. For Pevsner's definition of architecture see the intr. to his *Outline of European Architecture*, many editions. The logical problems of this definition have been discussed by T.A.P. van Leeuwen (1982) 1-7.

29. These were later published by Brewster, see Robison (1822).

30. Lodoli's ideas had gained wider currency in Italy from where they had indirectly infiltrated England, particularly through the rather problematic interpretation of Francesco Algarotti. Lodoli's disciple Francesco Algarotti was a well-read author in England, his various popular explications of Newtonianism running into several editions. A treatise on Painting which was published in 1764, was also translated into English. His *Saggio sopra l'architettura* of 1753 was surprisingly never translated into English. I have never come across a mention of Memmo's *Elementi d'Architettura Lodoliana* in the architectural theorists I have consulted. see also Edgar Kaufmann Jr. (1966) p. 159-175; Joseph Rykwert (1976) 21-26, reprinted in Rykwert (1982) pp. 115-122; Rykwert (1980) pp. 288-337 as well as Rykwert (1981) pp. 49 ff.; Greenough's connection with Lodolian functionalism and his admiration for Garbett in the same breath may represent two branches of the same historical development re-fusing. cf. Georg Germann (1987) pp. 214-223; Krufft (1985) pp. 179 ff. Lodoli's connections with English thinking are tenuous however and because of his own Socratic reluctance to publish, his ideas have been heavily polluted. Only the engineer Robert Mylne has hitherto been incontrovertibly identified as one of his disciples in England. Eileen Harris (1987). Bartholomew and Ware certainly were well-acquainted with the works of Robert Mylne; having said that, Bartholomew did not include the particular pamphlet in which Mylne expressed his own debt to Lodolian ideas in his

have been influenced by the architectural mathematicians Christopher Wren and Robert Hooke. Wherever he got the idea from, Robison's followers sought to reunite the two disciplines of architecture and engineering. They believed that a return to a structural approach to architecture would eventually bring contemporary practice to develop a system of building as self-consistent, as *pure* as the architecture of the Greeks and the Gothicists; a system where even the decorations were derived from a single unifying structural principle. This idea had also been forwarded by two antiquaries and scholars of architecture William Whewell and Robert Willis. In Germany the idea had been worked out by Bötticher and Hirt, to teacher's at Schinkel's Bauakademie.⁴² Garbett's exact relationship to Bötticher is unclear. Some of the resemblances between their ideas are too striking to be ignored, suggesting either that Garbett knew of Bötticher's *Die tektonik der Hellenen*, Berlin 1874 (1844-52) or that Bötticher knew of the latest developments in English theory, having consulted Bartholomew, Willis or even Robison.

Whatever the case regarding Bötticher, Garbett's merit was to distil from Alfred Bartholomew's treatment of structure in his *On the Decline of Excellence in the Structure and in the Science of Modern English Buildings*⁴³ the idea that a new style of construction would lead to a complete, pure and uncontaminated style of architecture. For Bartholomew structure was the single most important explanatory principle of his world; it embodied an aesthetic from which every other criterion or quality, such as style, beauty, goodness, truth and above all purity could be distilled:

*I hope to be able to prove satisfactorily to most candid and inquiring minds, THAT PURE TASTE IN ARCHITECTURE HAS IN PAST AGES BEEN PURELY STRUCTURAL; and that a departure from this wisdom is the true cause of the TASTE (or to speak more properly the WANT OF TASTE) in modern architecture being so VARIABLE, SO CAPRICIOUS, SO MUCH QUARRELLED ABOUT, SO MUCH QUESTIONED, AND SO SHORT-LIVED.*⁴⁴

Bibliography. John Robison, through his mechanical interpretation of architectural form was similarly well-acquainted with Mylne's ideas, using his works as illustrations to his own arguments, so that a connection between a watered down version of Lodolian functionalism and the Robison-Ware-Bartholomew-Garbett lineage of English architectural structuralism certainly cannot be discounted. Furthermore, Francesco Milizia's absorption of Algarotti's interpretation of Lodoli would certainly have worked their way through to Garbett who quoted Milizia extensively on several relevant issues. At the same time another dubious link is indicated by Bartholomew's wild enthusiasm for Piranesi: *The astonishing labours of this wonderful artist engraver and architect, will ever excite admiration: every architect should have always beside him in his study, some of the very best of Piranesi's engravings, in order to banish from his mind every inroad of meanness, either in design or drawing. (...) more insight into the construction of the Roman buildings, may be gathered from Piranesi's delineations, than from any other published works.* In: *Specifications*, § 196-197.

31. on Bötticher see W. Herrmann (1981) pp. 26-40. C. van Eck (1994) pp. 163-180.

32. *Bartholomew was probably the first to enumerate a principle now generally accepted by writers on art, viz. that the condition of true taste in architecture have always been intimately associated with those of structural excellence, and that, whenever the latter have been disregarded, the former have suffered in consequence.* Eastlake (1970) p. 215. See also G. Germann (1972) p. 128; Pace (1942) pp. 99-102 and Pevsner (1972) pp. 86-94. Alfred Bartholomew's *Specifications* was first published by John Williams in 1840. The preface is dated 1839. The second more common edition (which I have used) came out with the same publisher in 1846. Later it enjoyed renewed popularity when it was reissued in 1872. Incidentally the same date as Eastlake's *A History of the Gothic Revival* was published. The issue in 1872, was not, however a mere reprint, the new title may serve as an indication to the degree which Bartholomew no longer was himself: *Specifications for Practical Architecture..With an Essay on the Structure and science of Modern Buildings Upon the Basis of a work by A. Bartholomew, Thoroughly revised, corrected and greatly added to by Frederick Rogers*, 8o. pp. 415. It was published by R.A Sprigg, Atchley & Co., London 1872. This edition obviously met demand as it was reissued by Lockwood & Co. (the same publishers who issued the later editions of Garbett). A second revised addition with further additions was published in 1886 and a third in 1893.

33. *Specifications*, § XVI, The modulations in the typography are his.

Bartholomew declared Gothic architecture to be the apogee of a refining philosophy in which everything superfluous was cut away to produce pointed arches by necessity.⁴⁵ The possibility of necessitarian design by instituting the concept of structure as the organising principle of architecture constituted a forceful attraction to Garbett. Emerson had similarly insisted on necessity as the agent of purpose linking cause and effect.⁴⁶ Structure as the causal principle of architecture promised a cogency and a self-consistency which could beat off the loose and seemingly arbitrary appeal of skin-deep nostalgic fashions in style. Structural necessity binds processes to a purpose and gives their formulation into prescriptions something scientific, something positive.

Because of the necessitarian causality structure makes possible, it becomes a religio-scientific concept in Bartholomew's thinking, binding the processes of the world into one omniparous system. By establishing a direct link between form and function, structure is allowed to determine every aspect of architecture even its historical development.⁴⁷ Once Bartholomew was able to explain that, he turned around to the architectural establishment of his own time and stuck his finger deep into the wound, accusing architects of not being concerned with structure but with peripheries such as the mere outward forms, the *pelletterie* of architecture, as he called it, that is, only the visible aspects of style.⁴⁸

The cause of the problem, according to Bartholomew, was language. The misconception of what constituted the essence of architecture in modern England could be reduced to talking about architecture using the wrong language.⁴⁹ Those architects and

34. *Specifications*, § XX - XXV.

35. For example, when Emerson writes that *No man can quite exclude this element of Necessity from his labour*. Emerson (1883) p. 77.

36. *All these points of structure were the keys to everything else in architectural design: excellence of workmanship, intrinsic material, and the wisest structure of the time, were united with such artfulness, and with such beauty of thinking, that the several styles of architecture in different ages and in different countries were as highly wrought and beautiful as they were distinct, and were constantly progressing in science, with the exception of those minor fluctuations which at times threw art back for a season, till it revived and throve again more beautifully*. In: *Specifications*, § XXVI.

37. *Specifications*, preface, § XXX.

38. *I know that this doctrine [of structure as the basis of architecture] cannot be understood by the superficial un-architectural writers upon architecture and upon architectural taste; to them convenience, adaptation to the purpose, duration, and the other cardinal properties which are to be found in all the works of the Almighty, and which every wise man endeavours to imitate in his buildings, pass for coarseness and common-place vulgarity; they forget that all the inventions in Architecture have resulted from the calls of necessity and utility; the discoverers of them designing and elaborating as new wants demanded their efforts: under this feeling, they produced works in the highest degree artistic, without claiming to be artists; while all the works which have been professedly undertaken upon artistic principles, to the conformation of which no motives of structure have led, and consisting only of old inventions worked up afresh, (but of necessity degenerate as all secondary works are,) have been constantly questioned upon the very artistic grounds upon which they were professedly formed. The unstructural pretender to architecture, gives names to that which he would have us imagine to be taste; he would surprise the ignorant with a confusion of classical terms. Bartholomew, *Specifications*, § XXVIII-XXIX. W.H. Leeds is singled out as the main representative of this class of critic, even though: *he can perhaps be least quarrelled with, than most upon the score of some of his opinions with regard to external forms, the Pelletterie of architecture*. But this does not stop Bartholomew throwing Leeds' own words back into his face: *No doubt this gentleman himself gives very wholesome advice when he says, 'No doubt shallow smatterers, superficial dabblers, half educated pretenders, ought to be exterminated.'* *Specifications*, § XXX. The quotation comes from Leeds' *Essay on Modern Architecture*. (Which I have not been able to consult) The fault Leeds is made to represent is a common one, he does not allegedly know what he is talking about, Bartholomew continues: *It is a sad penalty for a man of ability to pay, a harsh squeezing in the parturition into public notoriety, to join those far gone in architectural shallowness who depreciate a knowledge of masonry and the intrinsic means by which have been constructed all the existing Buildings upon which could have been formed his taste and theirs: were I to go to him in his old capacity in the book-trade and to deride the structure of his day-book or ledger, or insult his knowledge of the fabrick of different kinds of paper, or speak flippantly of his knowledge of Pica and Nonpareil, he would perceive immediately the folly and impertinence, and would not scruple to tell me that my idle tongue is active upon a subject which I do not understand*.*

writers who were not conversant with structure as the *sine qua non*, the very essence of all architecture, talked of architecture using heretical categories. The contemporary crisis in architecture was, as far as Bartholomew was concerned, caused by ignorance of the fact that structure constitutes the *metaphysical* basis of architecture. One can even go further than that. Structure was not only the grammar of architecture, in Bartholomew's world it was seen as the grammar of existence generally. The Vitruvian trinity was to be seen as a divine principle which spoke the language of the Almighty!

*...convenience, adaptation to the purpose, duration, and the other cardinal properties (...) are to be found in all the works of the Almighty*⁵⁰

Architecture is but a special distillation of a ubiquitous architectonic. An architectural crisis erupts as soon as this principle, this rigidity, is lost sight, that is, when architecture is thought of in terms of wrong categories, such as *artistic principles* and *unnecessary names*. Artistry in architecture, by which he means ornamental clothing, stands for a form of decadence as the result of a blatant mistake of category. Because of this, everything in modern architecture oozes a progressive decline relative to the perfections of both Greek and Gothic *firmitas*. Once architecture was no longer thought of in terms of the architectonic, but in terms of visual effect etc. decline ensued: *by necessity*.

The programmatic similarity between Bartholomew's essay on the decline of architecture in England and Emerson's essay on *Art* is striking. Both are concerned with the prevention of aesthetic insulation, with the abolition of a distinction between, in very general terms, form and substance, beauty and its causal substructure, its purpose. Their common concern provided the groundwork for Garbett's two architectures: an architecture of surfaces, of hollow appearances, and an architecture of deeper causes, based and built on principles. Confining one's precepts to the copying of forms, creates a nostalgic but shallow historicism of surfaces. A penetration through the first into the second by causal analysis will ultimately show a way forward, a real progress.

How then does Garbett use the word *architecture proper*, quoted at the beginning of this chapter?

*All that relates to the appearance of buildings and their parts has been termed architectural design, or sometimes, "architecture proper," as not being reducible to the principles of any other art. (...) The present treatise is intended to confine itself to this, as far as it can be separated from the other branches, which, however (especially as regards the branch of construction), is not always possible.*⁵¹

This passage is meant as a development of Ruskin's use of the phrase *architecture proper*.⁵² When read in the light of the last sentence just quoted, architecture proper stands for that part of architecture where utilitarian and constructional needs have already been incorporated into the development of an aesthetics of architecture. Architecture proper now has to concern itself with the visual refinements of those necessities. With Ruskin architecture proper stood for the severance of architecture from building. Ruskin demanded the complete bisection of socially graded activities. Building was concerned with physical necessities, Architecture with intellectual and moral ones. As far as Garbett was concerned the severance of beauty from construction, of the physical from the intellectual and moral was *not always possible*. This was in fact an understatement. While

39. *Specifications*, § XXVIII-XXIX.

51 *Treatise*, p. iii-iv

52 *Treatise*, p. 2-3.

reading the text, it soon becomes clear that such a severance was never possible. With every precept Garbett formulated, the correlation between the three conditions of well-building was re-emphasised and strengthened. Whenever Garbett used the phrase *architecture proper* it had always be understood to incorporate architecture's roots in social purpose and structure. Even so, Garbett does concede different gradations in architecture proper. Where Garbett speaks of the *lower beauties of architecture*, Ruskin would speak of *mere building*.

To recapitulate, the concept of architecture was sharpened to a program whereby it was possible to integrate beauty with all the purposes of architecture. The separation of the concept of beauty from use and therefore from other conditions of good architecture such as adequate construction would lower architecture instead of making it more superior. Only a fully integrated definition of architecture, whereby everything is interrelated would make architecture a social imperative rather than a mere luxury.

The conceptual dislocation of the Vitruvian triad into separate principles, had therefore encouraged the concept of architecture *as clothing*. This in turn had eventually caused the *battle of styles*. Ware, Bartholomew and a number of other theorists did not like the idea of architecture as clothing. Instead they wanted to conceive of architecture as an integrated organism; a body where the form was the necessary product of content. The grammar of forms symptomatic of a style had to be seen as the eruptions of a structural cause. The truth content of these forms therefore necessitated dissection. Here is Ware on the subject:

It is true, he wrote, elevations of the exterior and elevations of the interior of very magnificent buildings of the Middle ages have been made with scrupulous accuracy; but these drawings have served to amaze the unlearned, rather than to instruct...The most useful drawing to a builder in erecting an edifice, the most difficult drawing for an architect to make, and the drawing least intelligible to the gentleman, and which makes least show in a collection is a section. It is from sections (...) that a knowledge of the construction of buildings is to be obtained.⁵³

The dissection of a building allowed architecture to be conceived as a body, rather than as a frame with loose hanging clothes. Dissection allowed the theorist to discover the causal principle of style:

the improvements naturally arising out of the frequent use of vaults during the middle ages, would have led to the discovery of the pointed arch; whether Norman walls had, or had not been ornamented with intersecting circular arches.⁵⁴

Only once a building had been dissected could the elevation be considered physiognomically interesting as referring to correspondences between the *inside* and the *outside*.

This particular conception of architectural style descended from a large and complex pattern of influences which centre around the rationalisation of the Gothic. It begins, perhaps, with the mathematicians of the seventeenth century such as Robert Hooke, David Gregory and Sir Christopher Wren. Later this pattern of influences embraces the writings of Cordemoy, the teaching and subsequent interpretation of Lodoli and the work of the engineer of Giovanni Poleni. A prominent member of this group is Soufflot who specifically admired Wren's gothic construction of St. Paul's and used the ideas for his St. Geneviève.

1. Ware (1809) p. 58 ff.

2. Ware (1809) p. 61.

Ware, Bartholomew and Garbett used this structural cause of style to rewrite architectural history in terms of the changing size of the gap separating the decorative and constructive aspects of building.

The separation of the organic conception of the Vitruvian triad had, as far as Garbett was concerned, inaugurated the possibility of the stylistic pluralism so characteristic of the architecture of Rome and the Romanesque and the Renaissance, the Baroque and the nineteenth centuries.⁵⁵ This pluralism was only possible when the separation between the decorative and the constructive aspects of building had become complete, that is to say, after the death of a particular *style of construction*. In fact that pluralism was the instrument of murder. Construction was sensitive to the parasitical tendencies of decoration. Decoration began to take over the mind of an ambitious architect as soon as he felt himself to be unable to contribute further to the perfecting of a style of construction. As soon as he switched his attention to matters of detail and surface, the style had eclipsed its perfection and was launched into a painful process of degeneration. All this because of an undue emphasis on decorative ingenuity. This was the disease of which both the Greek and Gothic styles had died of. Once construction was lost sight of its forms became separated from their cause. Once the forms symptomatic of a style became no more than applications the choice of a style was allowed to be determined by other criteria than a structural truth. Stylistic truth could therefore only be delivered by dissection.

All three forms of truth as used by Garbett address an issue which is larger than their particular target. They concern the need for constructs and the consequent projection of metaphysical realities which defend against the arbitrary.

Beauty is the vision of necessity.

All three truths are not really any different, they represent various stages during the nomadic wanderings of a single concern, that is with the desire to have cracked the mystery of the way the world works. It may sound a little frivolous to tie architecture to such enormous metaphysical concerns. But aesthetics is primarily a metaphysical discipline. Each definition of beauty proclaims its discovery of the mechanics of the mind and the creation. Each system of philosophy claims to have reconstructed the way things are and proceeds to formulate ethical norms of behaviour with reference to that reality. Those so-called discoveries are full of the pathos of certainty and serve as the basis for the theorist with which he can start to work out its practical implications.

Constructive truth & constructive unity

Constructive truth, as discovered by the anatomical dissection of a building, brings us to the normative meaning of the word truth. This truth is dependent on the idea of consistency, or that which exhibits unity. It is a form of truth which is derived at by following out the implications of the interdependent assumptions given above. Furthermore it is based on the irreducible axioms which have the concept of nature as their ultimate authority:

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3. Samuel Ware had already criticised Vitruvius on this score writing: *Vitruvius, who has treated on all the subjects which appeared to him to have any relation to architecture, has been wholly silent in respect to the advantage to be obtained from mechanics, in acquiring a knowledge of, and in decomposing forces, and in determining the point to sustain them. The art of construction does not form any part of his Treatise. From this circumstance alone, were not their buildings in confirmation, we may conclude that they were employed, like many modern architects, in the pleasing investigation of interior and exterior decoration and internal arrangement, leaving the question of stability, and the details of the means of execution to the workman.* Ware (1822) p. 44.

*I am convinced, Garbett wrote, that if we really understood this principle of contrast, and determined to embody it alone without compromise, in a vertical pressure building, we should be led to the complete Doric order, though we had never seen it.*⁵⁶

Garbett wanted to demonstrate the completeness of the perfection of the Doric order by subjecting its rational to an inversion. The process of design, being based on reason, must be completely reversible. The quotation explains the nature of purity as understood by Garbett. Purity signifies conformance to a self-consistent set of principles which are believed to be *a priori* and so rigorous as to be completely reversible. The Doric order is an inevitable eruption during the purposive analysis of truth. There is nothing arbitrary in its genesis, it is the necessary result of a meticulous search for the implications of a self-consistent set of principles.

This way of thinking lead to two important normative principles which eventually led Garbett to make a remarkable prophecy with regard to the emergence of a modern and self-consistent style of architecture. These are the principles of constructive truth and constructive unity:

The principle of constructive truth coincided largely with the idea of structural honesty as implied by Laugier, explained by Lodoli and promoted, among others by Pugin's *True Principles*. It required that *a building [should] never appear to be constructed on different statical principles from those really employed in its construction.*⁵⁷ To break this principle was to lie. Garbett used the principle to formulate an accusation against the contemporary building world: *The whole of modern Gothic architecture is a constructive falsehood an assertion which he based on an adaptation of Samuel Ware's definition of Gothic which stated that the peculiarities of this style [the Gothic] grew from the practice of constructing a vaulted ceiling of stone.*⁵⁸

The second principle is that of Constructive Unity, which says that what is true for construction is also true for decoration. Constructive unity requires a uniform style of ornament throughout the same building. But, he wrote, *Architecture is not mere beauty of form, mere eumorphy; if it were so a beautiful form would be beautiful wherever exhibited.* The beauty of form must be subordinate to *statical fitness* and in order for that to be seen, *it is necessary that the various pressures be perceived.*⁵⁹ And if it is necessary to treat form consistently, it is even more necessary that the treatment of pressures is consistent. This leads us onto the concept of style.

Unity of style, as formulated by Garbett, consisted in applying a single principle of construction throughout a building. Alfred Bartholomew, following John Robison's articles on structural mechanics in the *Encyclopaedia Britannica*, defined three styles of construction. That is, three methods of applying force to solids: by Cross strain, by compression and by tension. These three modes could be divided into three styles of building namely the depressile, the compressile and the tensile.

The depressile system involved the exclusive use of cross-strain, i.e. of vertical pressure. Greek architecture used this system most consistently and may therefore be called pure. The compressile system involved the exclusive use of oblique pressure and in order for it to represent a unified whole it had to avoid any hint of cross strain. The purest use of this principle is exhibited by the Gothic of the thirteenth and fourteenth centuries as exemplified by the great cathedrals in England, France and Germany. The

4. *Treatise*, p. 142. cf. Steadman (1979).

5. *Treatise*, p. 130.

6. *Treatise*, p. 130. For Ware see bibliography.

7. *Treatise*, p. 131.

tensile system was thought to combine the advantages of both previous systems. This was because all its active pressures would be vertical like the depressile system. Yet it would avoid the necessary wastage of material by avoiding cross strain like the compressile system.

Now there were three available systems of building. And yet, Garbett observed, there had been only two systems of architecture, i.e. only two systems which exhibited a constructive truthfulness and a constructive unity. These are the Greek and the Gothic. The third system has yet to be elaborated into an architectural style:

*The first two systems are passed and dead; we may admire the fading vestiges of their loveliness, but can never revive them. The third is the destined architecture of the future.*⁶⁰

Style, like his third use of the word truth, is for Garbett the logical result of the consistent application of underlying ideas and not the mere sum of details.⁶¹

STYLE & STYLES OF SEARCHING

Awareness of style as a problematic and isolable element in a work of art has emerged in the audience for art only at certain historical moments - as a front behind which other issues, ultimately ethical and political are being debated. The notion of "having a style" is one of the solutions that has arisen...to the crises that have threatened old ideas of truth, of moral rectitude, and also of naturalness. Susan Sontag, On Style.

The architecture of time

If twentieth-century architecture was an attempt to come to terms with space, then nineteenth century architecture was an attempt to come to terms with time. Time in the sense of historical time, the point of accumulation of an historical identity. A preoccupation with time in terms of archaeological reconstruction and cultural affiliation, dominates most of the contemporary discussions about architecture.

From a perspective coloured by the rise of the Modern Movement, where the preoccupation with time manifested itself in the attempt to throw off its "weight" with the new-found confidence in formal nihilism and brusque anti-historicism, it is not difficult to concede to the commonly held charge that Victorian architecture is characterised by the stigma of failure and doubt.⁶² This charge, for those who have come to love Victorian architecture, has to be explained. But even when it is explained, it cannot be denied that the contemporary architects were preoccupied with failure and there was a pervasive sense of doubt with regard to the right way ahead for architecture. These concerns presuppose an icon, an ideal which Victorian architecture as it was realised, did not achieve, at least in the eyes of its (contemporary) critics. The two questions which have to be asked therefore are: What was this ideal, and, if Victorian architecture failed in its own eyes, What did it achieve?

Historically the Victorian architectural ideal has been represented in terms of style. The Victorians, so the saying goes, had an intense desire to have a style of their own. Their moral values, their moral aesthetics could not be fully expressed without a style of their own. Indeed the American Thomas Hastings, responded to the debate by saying that *style is the problem solved.*⁶³ Summerson believes, and he is probably right, that every

8. *Treatise*, p. 135.

9. Summerson (1970) p. 86.

62. *Our failure to appreciate that early and mid Victorian architecture was, in its own time and in the eyes of its own best-informed critics, horribly unsuccessful.* Summerson (1970) p. 1. also p. 5: *The Conception of the Victorian age as the age of doubt is, of course, familiar-crucially in the sphere of religious belief.* Summerson goes on to quote House (1949) p. 71-77.

63. Gill (1980) p.88. I am indebted to Dr. T.A.P. van Leeuwen for this reference.

Victorian building of any consequence is a statement of stylistic belief- either a belief in one style, or the peaceful coexistence of styles, or in the efficacy of a mixed style.⁶⁴ What they all shared in common was the desire for style. The problem of style, having identified a selection of styles became one of choice. The choices involved, due to the archaeology of styles, forced the architect, the critic and the historian to think in terms of a Dilemma of Style. In fact Mordaunt Crook, who chose the phrase as the title of his book, went so far as to use for his motto a quotation by Pevsner who said that *if the historian of architecture does not take style dead seriously, he stops being a historian*. Style indicates the identity of time and place, and historians reconstruct identities.

Histories of Victorian architecture were consequently structured along a supposed Battle of Styles.⁶⁵ This was appropriate as battles represent the conflict of polarities, choices which are clearly defined. The clash of the two polarities is necessarily confused and the common accusation against nineteenth century architecture is that it is confused and full of internal conflict. At the same time it is highly selective and tends to exclude theorists and architects who did not engage in the war but sought to disassemble the metaphysics of dichotomies around which the conflict between styles was waged. But even for them, style, that is its simultaneous profusion and lack was seen as the main problem. Ruskin, in the Lamp of Obedience, dismissed the popular clamour for a *new* style of architecture but did see the need for *some* style. His problem was that even his humble demand for a single agreed style, to be exploited across the country, would elude fixation, while the style he would advocate in his *Stones of Venice* would turn into a *Frankenstein monster*.⁶⁶

The owning of a style

Victorian architecture should therefore be characterised as a searching architecture, an architecture in search of a rigorous style *of its own*.⁶⁷ The nineteenth century, so conscious of history, felt a desperate need to separate itself. The problem in the eyes of many critics was simply that the architect did not succeed in finding a style which nineteenth century England could legitimately and comfortably call *its own*.

Many of the central themes in the architectural debate have at one time or another been singled out as the cause of this sense of stylelessness that the century apparently suffered from: the profusion and subsequent confusion of historical styles, the emptiness of their application in a different context with regard to time and place, their irrelevance to modern needs, the romantic self-indulgence they promoted etc.

Being without a style, that is Stylelessness, is merely another way of saying style.⁶⁸ The lack of a style in architecture did not actually denote a stylelessness as such, it denoted an undesirableness which the pejorative inflection of the word styleless emphasised. Stylelessness could mean anything from confusion to slavery to the past. I shall argue that Victorian architecture, being such a grand failure has opened up a new category of success.

The concept of style as a stable entity is, to a large extent a red herring, an antiquated explanatory principle. Even so it is a useful word. Style should be a word which, with the benefit of hindsight can be adduced to a period or place. It represents the

64. Summerson (1970) p. 6.

65. cf. J.D. Kornwolf (1975) pp. 37-47. and Crook (1987); Eastlake (1970) is the first to provide a historical chapter with the title "The Battle of Styles" Chapter VII, p. 132 ff. Robert Kerr used the phrase as a title to a paper he read at the Architectural Exhibition and which was published in *The Builder* (1860) 292-294, cf. Summerson (1970) p. 7; Collins (1965) provides a very clear and coherent classification of the several problems of style in the nineteenth century.

66. Crook (1987) p.93-94.

67. *Seven Lamps*, "The Lamp of Obedience," § VI, p. 232.

68. Sontag (1987) p. 137 f.

recognition of a differentiated pattern, an order. Elements separate and reconfigure and come to stand for a new whole. To make style into a normative concept which projects such differentiations into the future changes the nature of the insight irretrievably. The two sorts of style, the hindsight and the foresight are not the same. When a style is felt lacking, the search for a future style becomes itself an element of the hindsight-style. The normative and historical styles intersect only at the point where they both represent an instance of order. But the kind of order each represents is completely different in each case.

Style represents something in terms of something else. It is form representing political, social, cultural and moral aspirations. In the nineteenth century the concept of style was asked to represent the thing that was being aspired to, the ideal that was being searched for: the achievement of aspirations. As such the style of the nineteenth century could not be other than faceless and its achievements could only be seen as a failure. The architects thought their search for a style would entail a search for a pot of gold at the end of the rainbow, something tangible and whole that was there, if only they could get to it. Now with the benefit of hindsight we can say that their search for a style constituted *their style*. Their fault, if such it was, was to search in the past. They identified, constructed homogeneities, aesthetic units in terms of period and place which they called styles. Then they projected those homogeneities onto their own times and felt depressed. They were not able to see their own unities. The flaw was based on the incredible confidence that their copies were indistinguishable from the *true* objects. That style of the nineteenth century represents not the product of aspirations but the process of aspiration itself in a way that is more abstract than the way the Gothic style they so admired stood for the process of aspiration was lost on them. Victorian architecture is the architecture of aspiration and search. But without a concomitant belief. It is a tragic architecture in that sense, and truly heroic in its bewilderment. For the doubting contemporary critics and for the certain and self-congratulatory modernists, the gap between the process and the product represents the supposed failure. But that is precisely what constitutes its success. Victorian architecture constitutes an analysis of process which, as far as its theoretical foundations are concerned, stands unequalled. It is nineteenth century theory which constitutes modern theory. The architecture of the nineteenth century continually achieved its projected end but that end, when it presented itself, was rejected and went unrecognised. As it stands, Victorian architecture is a monument to time: the eternal unfulfillment of desire. It is the architectural equivalent of Plato's Eros, the demi-god whose eternity had to be spent being an in-between, always aspiring, always unsatisfied and never realising that he was desiring desire itself.

Fragmentism or Disfigurism

The history of the concept of Style could be interpreted as the history of the attempt to overcome the duality between content and form, either by acceptance of that duality or by its rejection.⁶⁹ The symptoms of style, by being separated from their genitive principles, disfigured both the content and the form of an object. These disfigurements represent the style of the nineteenth century, a nostalgic historicism of fragments, often put together uncomfortably to compose some of the most sweeping and moving buildings of all time, buildings exuding an air of helpless energy, bewilderment and even disillusionment. Many Victorian buildings were snubbed in their attempt to be what they were not. The most poignant examples being Street's Law Courts and Pugin's churches.⁷⁰ Buildings practising their disappointment: but never giving up. If ever there was an architecture of desire, of intense hero-worship, an architecture reaching out to emulate, it was the architecture of

69. Sontag (1987) p. 139 f.

70. Pugin had complained in *The Rambler* about the fact that lack of money often spoils the realisation of initially good designs. Pevsner (1972) pp. 104, 114 and p. 222.

the nineteenth century. Never before had there been such a need for buildings and never before had there been such a desire for style and these were factors curiously compatible with the energy and hope which the architects invested in their designs.

The Victorians, just as the Moderns, were immediately given what they wanted: a style of their own. Only when they saw the style they had asked for, many no longer wanted it.

Dressing with the sum of details

If one defines style as John Summerson did with reference to G.G. Scott and *many of his contemporaries*, as the sum of details, or, as a question of ornament, then one is naturally forced to talk of architecture in terms of surfaces, elements and accretions.⁷¹

Architecture, to use the contemporary satirical analogy of Thomas Carlyle's *Sartor Resartus*, was no more than a way of dressing up a frame and the architect was no more than a tailor. This is consistent with Ruskin's definition of architecture as no more than a dummy dressed in clothes, and not as Mies would argue later, a question of the unalterable relation between skin and bones. Buildings, structures, could be dressed in a consistent style and change their clothes even after the designing process had been completed.⁷² Style as such was superimposed on walls, just as Palazzo Rucellai is the engraving of a (mathematical and therefore universal) order onto an otherwise useless and referenceless map⁷³

Such a conception of style did not allow for purities and contaminations other than the cultural or political, whereby the *wrong* choice of style could wound national, social or cultural aspirations. Architecture's *truth*, in the way that, for example, Garbett speaks of architectural truth, was controlled by the consistency in primitivist, nationalist or even metaphysical perceptions of the past and their consequent projection onto the present. Contemporary reconstructions of origins encouraged a view of style as a collection of details united by their concurrence in place and time. That concurrence could be culturally determined or completely fortuitous: the intersecting round arches in Norman and Romanesque architecture were supposed to have suggested the pointed arch; avenues of trees suggested the lofty vaulted procession of a nave. The moment of suggestion is arbitrary, but the effect of that suggestion is a determinant of the culture. Fortuitous concurrences were linked to cultural aspirations by the idea that search is rewarded by appropriate discoveries: Decorative invention stands the service of desire, vision and belief.⁷⁴ This makes it all the more tragic that the nineteenth century searched so desperately and did not seem to find, working themselves up into a dislike of the haunted places where they were constantly looking.

Stylism

It has been argued by many previous historians that the process of historical and geographical differentiation in terms of disciplines like history, geography and anthropology caused a multiplication of styles by way of cell-division; periods and their products were divided from the continuum and further subdivided until the process went too far and started to undermine itself. This was a process of division informed by a specific aesthetics. When the choice of style was being rationalised in terms of the way each style answered its aspirations, the solving of the dilemma of choice encouraged a form of political polarisation which was fought out on the grounds of historical (read mythological) allegiance. The Greek was set up against the Goth by setting up the

71. Summerson (1970) p. 6 & p. 86.

72. cf. the famous story of Pugin's condemnation of the Houses of Parliament, see Ferrey (1861).

⁷³ cf. Rykwert, "Alberti" *Leonis Baptiste Alberti*, AD Profiles 21, ed. J. Rykwert.

74. Kostof (1985) chapter 14.

nineteenth century image of the Greek against the nineteenth century image of the 12th, 13th or 14th century "Goth". It was not a battle of styles but a battle of mythologies whereby the Greek and the Goth both represented contemporary national, political and economic aspirations much in the way a two party system divides social ambitions into left and right.

Those political possibilities were further subdivided, within one camp; Early Gothic was set up against Late Gothic as the most appropriate model for the architect. Now the choice was determined by the mechanism of historical perfectibility. Early Gothic stood for progress to perfection while Late- Gothic stood for capitulation and decline. The choice was easy. When French Gothic was rejected in favour of the Gothic of England this was done on the basis of national sympathies.

In order to understand what style meant it is necessary to inquire into what the idea of nation meant, one has to inquire into the nineteenth century understanding of the mechanics of history and into the nostalgic or primitivist attitudes towards various episodes in history. Style thus becomes part of a social history. It is a truism to point out that Pugin's *Contrasts* of 1836 exhibits not so much a contrast in architectural styles as much as a contrast in social, ethical and political attitudes.⁷⁵

The dilemma with regard to design is then defined in terms of consumer choice. The question becomes: Do we want this style, or do we want that style? Such questions reduce architecture to a series of enclosed and enclosing surfaces which can be made to speak through painting and sculpture. In fact that had been Ruskin's definition of architecture in the preface to the second edition of *The Seven Lamps of Architecture* written in 1856. In his Lamp of Sacrifice of a few years earlier, Ruskin had already launched the idea of architecture being that which was added to a basic structure. This was implied by the distinction between architecture and building based on the *unnecessary* detail.⁷⁶ If architecture then was reduced to a series of choices much as one is faced with in a *hair design studio*, how did architects choose?

Structure

During the 1840's Pugin made an attempt to deepen discourse with regard to choice. He tried to formulate structural purities but made the mistake of applying the epithet of structural purity exclusively to Gothic building methods. That was because his predilection for Gothic had already been determined by a connection between religion and its setting. It is not for nothing he called Gothic *Christian architecture*. Hitchcock rightly observed that the precepts Pugin wanted to reserve for Gothic construction and decoration were often equally applicable to any other style.⁷⁷ Style, or rather Gothic, for Pugin represented a complex flowering of tradition; maybe even in Eliot's understanding of the word as the presence of the past. Style consisted of a grammar of details which had converged in time and place because of cultural forces. They were therefore emblematic of those cultural forces and helped to define social norms. Pugin demanded that the grammar of details be seen as consistent with the structural demands of a building, while both had to be seen as peculiarly expressive of a state of mind.

The Ecclesiologists were not so concerned with structure. But they followed out the implications of Pugin's ideas. For the Ecclesiologists style was the shape of habit, the shape and differentiation of space demanded by a special liturgy. The purpose of form was to be found in the religious circumstances in which it originated. Form as such symbolised a sense of belonging to a particular configuration of high Anglican beliefs. The nineteenth century architect, headed by Pugin and the Ecclesiologists, thought that if they

75. Collins (1965) p. 100 f. & Macleod (1971) chapter 1.

76. *Seven Lamps*, p. 20 & 32.

77. Hitchcock (1954).

could retrieve the style, purely, that is in all the aspects they were able to consider, they would retrieve the concomitant cultural values.

Linguists and national unity

To diffuse the polarisation made necessary by style-apology, a number of Victorians promoted an architectural multi-lingualism and internationalism, as Donaldson did in his *Preliminary Discourse of 1842*:

Styles in architecture may be compared to languages in literature. There is no style, as there is no language, which has not its peculiar beauties, its individual fitness and power...as the traveller who is master of several languages finds himself at ease among the people with whose language he is familiar, so the architect is the more fitted for the emergencies of his difficult career, who can command the majesty of the classic styles, the sublimity of the Gothic, the grace of the Revival, or the brilliant fancy of Arabic. And to pursue the analogy still further, as no scholar can fully master a language who is not familiar with the literature and manners and religion of a people, so no architect can fully appreciate any style of art, who knows not the history of the country and the habits of thought, the intelligence and customs of the nations...⁷⁸

A good architect was a good linguist: He spoke languages, many languages.⁷⁹ The geographical division of language and the relation between climate and its architectural response caused many to question the appropriateness of different styles of architecture to be adopted by England. The alleged absurdity of the Greek style for our climate was illustrated in both Pugin's *True Principles of Pointed or Christian architecture* of 1841 and earlier in John Robison's *System of Mechanical Philosophy* edited by David Brewster, Edinburgh 1822 and quoted extensively by Bartholomew in his *Specifications*.⁸⁰

Ruskin used the linguistic analogy to sketch a model for an architectural education whereby the pupil was to learn the grammar of architecture in the same way he would learn to read and write Latin. A style had to be learnt thoroughly by copying it out endlessly in the hope that the repetition and the endless reproduction would eventually be turned into an understanding of the style.⁸¹ Significantly Ruskin dropped the linguistic analogy when he wanted to promote the idea of a single style for England. Ruskin was concerned architecture only in so far that it could affect the moral character of England. He wanted an England which could unite under a single moral banner represented by an architecture made vital by his precepts and made uniform by applying those precepts to a single style. The moral unity he was after could not be represented by something dissolute and it was this emblem of unity which he was not able to recognise in the stylistic pluralism exhibited in contemporary buildings and therefore thought lacking. Ruskin does not see the writing of the nineteenth century. Because of his identification of style with a set of details he could not see the style of the nineteenth-century in terms other criteria. The architects of the nineteenth century had changed the metaphysical nature of style without being aware of it. For Ruskin there was no gap between Gothic and Neo-Gothic, unless that gap represented the failure of contemporary architects to emulate the forms and design procedures of yore, or the failure of the social structure to allow the carver to derive the same satisfaction from his labour. As such the Nineteenth century, according to Ruskin *lacks* a style of its own, it lacks an identity because of its narrow conception of what identity means. The nineteenth century was seen to feed

78. Donaldson (1842) p. 28.

79. On the various aspects of the linguistic analogy see: Vidler (1977) pp. 37-41, Guillerme (1977) 21-26.

80. Pugin (1841) p. 56 fig. 3 the subject is also discussed earlier on p. 12. It would seem very likely that Pugin used Robison as a source for his functionalist theories as there are quite a few similarities in their ideas.

81. *Seven Lamps*, "The Lamp of Obedience," § VII, p. 236.

upon a multitude of identities from other ages. Ruskin does not see, or does not want to see that it is precisely the encyclopaedic historicism rather than the particular styles that were used that constitutes the style of the nineteenth century.

What is interesting is that Ruskin did not feel that the linguistic analogy was strong enough to enforce a single style of architecture. To enforce the need for a single style he uses the analogy of justice. Any code of laws, he writes, if they are good laws will do, but that code, once adopted must be enforced from Cornwall to Northumberland.⁸² A multiplicity of codes would be disastrous to a nation. We have learnt to cope with the Babylonian curse by inventing translation, and linguists are the medium. But a multiplicity of codes of laws would worsen the confusion. Style may have been a language, but the language had to be made uniform by law. Ruskin realised, as opposed to Pugin who did not, that his prescriptions for good architecture could be applied to any style, that is, the principles of architecture he laid down preceded any formal language of forms and ornaments. Principles constitute the axioms, the grammar of style. The actual language used, like dress appropriate to an occasion, was a question of convention, a social contract.

Mechanics and the two pure styles

How did Garbett respond to *the problem of style*? Put bluntly, Garbett's approach rubbished the duality between content and form. His definition of style did not contradict the linguistic analogy, rather it developed that analogy to incorporate the logic of etymologies. His definition stems from the rationalisation of the Gothic as more than just a system of decoration, more than just the result of quick and accidental associations, more than just the expression of social and religious aspirations.⁸³ It recognised Gothic as a clever mechanistic system of construction, a discovery that descends from Wren, Laugier, Cordemoy, Soufflot, Lodoli and Rondelet and which later found its most powerful advocate in the writings of Viollet-le-Duc.⁸⁴ This approach had led to the recognition that Greek architecture, as opposed to Roman architecture, was also derived from a single constructive principle and the problem of gravity in relation to the strength and behaviour of materials and that Roman architecture basically represented a mixed style moving from the one to the other. One could go as far as to say that the hegemony of Rome as the icon of aesthetic refinement had blurred or veiled the structural or rationalist investigation of architecture. This is because Garbett's vision of architectural style did not rest solely on the mechanistic interpretation of Gothic but also on Greek. It was the recognition of two *pure* styles which led to his theory of the nature of style.

With these two discoveries the whole history of architecture could be rewritten in terms of the struggle with gravity with the development of the arch from the post and lintel as its main theme. One formal attempt at such a history, referred to by Bartholomew, is Seroux d'Agincourt's *Histoire de l'art, par les monumens, depuis sa décadence au 4e siècle jusqu'à son renouvellement au 16e*. (Paris 1823) It is illustrated by plates in which every architectural theme is shown in a chronological succession. But this history deals only with the fall of Rome onwards. Even so, one of d'Agincourt's illustrations traces the development of the arch. Samuel Ware attempted a sketch of a

82. *Seven Lamps*, "The Lamp of Obedience," § IV, p. 232.

83. Mark (1977) p. 52: *Following soon after its genesis as a romantic literary movement, the Gothic revival kindled a number of serious investigations of the organisation and construction of medieval building. The bulk of these early studies have been so far surpassed by modern scholarship that they remain merely as interesting curiosities...* Willis may well have been a direct source for Viollet-le-Duc, but he must be seen as part of a tradition which, in England at least, starts with John Robison or even Sir Christopher Wren. Willis was certainly not one of the first to provide a functionalist or mechanistic interpretation of Gothic architecture. He was one of the most lucid, and one of the most widely read but his ideas feed on the writings of both John Robison, Samuel Ware and others.

84. cf. Middleton (1958) & (1962).

similar history in his *Observations on Vaults and on the Origin of the Principal Features of Decorative Architecture* which he read before the Royal Society of Antiquities in March 1812.⁸⁵ He, following Robison, saw the Gothic arch as derived from the catenary principle as formulated by Robert Hooke and David Gregory in the seventeenth century and Giovanni Poleni in the eighteenth. The Gothic arch was to be interpreted simply as a geometric variation easily constructed with the use of a compass, while the curve of the catenary was incorporated into the mass of the building's masonry. Even earlier attempts to view Gothic architecture from a structural point of view were made by Michael Young in his "The Origin and Theory of Gothic Architecture" of 1790 and to James Andersen in his "Thoughts on the origins, excellencies, and defects of the Grecian and Gothic Styles of Architecture," of 1800-1801.⁸⁶ John Robison and before him the engineer James Rennie the elder, should, I think, be credited with re-introducing this concept into British thought, even if they did not invent it themselves. Robison's articles for the 3rd edition of the *Encyclopaedia Britannica* were revolutionary and found a large following of which Willis, Bartholomew and ultimately Garbett are the offspring. In fact it is highly probable that Pugin based some of his ideas for *The True Principles* on the writings of Robison.

But even for John Robison the idea that Gothic was more than just a system of decoration would not have been new.⁸⁷ Wren had exhibited the rational of Gothic architecture in St Paul's? The French had certainly admired his exposé, especially Soufflot in his Ste. Geneviève. The Abbé de Cordemoy, and others had formulated that rationalism preparing for its domination of architectural theory in the writings of Viollet-le-Duc. Giovanni Poleni, who was part of the circle around Carlo Lodoli also made use of the catenary principle.⁸⁸ But it was Robison and those architectural writers who modelled themselves on his ideas, such as Samuel Ware, Bartholomew and Garbett who used such principles to modify the idea of style.

Style

Style began with an integrated conception of the Vitruvian triad. It was a system of related forms in the service of convenience and dictated by the behaviour of materials under the force of gravity. Style was structure (incorporating both organisation and constructional aspects) in the service of desire. Structure became the core of a system from which a centrifugal logic could derive every detail of a building. As a direct consequence of this they came with very different solutions to the contemporary *dilemma of style*.

This is a definition in which style, as Roland Barthes pointed out *assumes and informs the contrast between form and content, it is the surface of an underlying structure*. Such a conception of style focuses on the structural principle from which a linguistic code is deduced by composing on a single theme, such as the pointed arch in all its constructive and decorative variations. This approach to style derives from the extreme reductionism to which both aesthetics and science were subject to in the eighteenth century whereby

85. It was published as "Observations on the Origin of the principal Features of Decorative Architecture," *Archeologia*, XVIII (1817) *Archeologia*, XVIII (1817) § XL. and was published in Ware (1822) A first attempt at such a history on his part is the appendix to Ware (1809) entitled "The Inquiry into the origin of the pointed arch," pp. 57 ff.

86. The rev. Michael Young is not mentioned by Frankl, see Pevsner (1972) p. 16-17 for a brief treatment, the paper appeared in the *Transactions of the Hibernian Academy*, III (1790) 55 ff. On Andersen see Frankl (1960) pp. 493-496. Andersen is also mentioned by Pevsner (1972) p. 17. The paper appeared in *Recreations in Agriculture, Natural History, Arts and Miscellaneous Literature*, London, ii, pp. 187, 280, 418; iii, p. 115, iv, 272, 382, 448.

87. cf. Middleton (1958) & (1962).

88. Poleni (1748); for background on Poleni see Rykwert (1982) pp. 115-122 & Collins (1979) pp. 367 ff. who also mentions Hübsch (1838) and Millington (1839).

les Beaux-Arts [sont] réduit à un même principe, a reductionism which in Architecture had been attempted by Laugier.⁸⁹

If the eruption of a style can be related to a single principle, namely the integrity of the Vitruvian triad, then the argument which is unleashed will run along the lines of truths and purities measuring the varying degrees of deviance from a meridian defined by that principle. The structural definition of style seeks out the bones and organs beneath the skin as Mies was later to realise. Garbett, following the ideas of Robison, Samuel Ware and Bartholomew defined style in terms of structure, or rather defined structure in terms of style. Style was the emanation of forms from a single static principle by which forces exerted by materials which were piled or tied came to terms with gravity and found their appropriate form. This allowed Greek to be as *pure* as Gothic, and allowed a third principle of construction to give a glimpse of a future and become the hope of that future. As soon as *purities* and their antithesis assemble around structure as the cause of truths and purities, and specifically not around the idea of a style as a purely formal index of a *Zeitgeist* or *Volkgeist* it is no longer satisfying to take sides in a battle of styles, this battle becomes irrelevant. Thus, in Garbett, and to a lesser extent in Bartholomew, one can recognise a school which engages in a different battle, not the battle of styles but a battle against ignorance. Bartholomew and Garbett opened up the search for a new style, based on a new conception of what style was. The main protagonists of this conception, despite Garbett and Bartholomew, would not be English. Garbett gained such popularity in America, precisely because he was a supplement to the slightly later writings of Viollet-le-Duc and the untranslated theories circulating in the German colonies around Chicago, of Gottfried Semper.

89. Batteux (1746) The idea that a single principle underpins the whole of creation is a theological and cosmological notion which, historically, has proved difficult to let go of, going back all the way to the idea of The One as formulated by Plato, Plotinus and the early theologians.