CHAPTER THIRTEEN: IMITATION AND NATURAL FORM

O Nature! -Or What is Nature? Ha! why do I not name thee God? Art not thou the "Living Garment of God? Thomas Carlyle, Sartor Resartus.

Introduction

This chapter, which broadly covers the first part of the fourth chapter of Garbett's Treatise, looks at the latter's response to the imitation debate which had been gaining momentum ever since the historicist tendencies inaugurated by the architects of the Renaissance. The number of differentiated and decoded historical styles had increased considerably during the eighteenth century and become available for imitation. It is because of this stylistic pluralism and the way in which those styles were being applied to the structural carcass of buildings, that the distinction between copyism and imitation became a matter of importance to architectural critics during the first half of the nineteenth century. What is surprising is the lack of innovation shown with regard to the conceptual development of imitation. Many of the ideas Garbett adopts from Reynolds and Quatremère de Quincy have their direct origin in Greek philosophy and can be seen to have altered really very little over the centuries. Garbett's originality with regard to the debate concerning imitation does not reside in the philosophical refinement of the concept of imitation, but rather in the use he makes of it with regard to the historical reconstruction of origins.

Nature's justification

It is the highest possible aim of architecture, as of all the other fine arts, to <u>imitate</u> <u>nature</u>. This has been generally admitted; but the kind of nature to be imitated, and the mode of imitation seem to be very variously understood.' ¹

This passage highlights the four basic questions which have to be dealt with in

^{1.} Treatise, p. 109.

this section: Why is it the highest aim of architecture to imitate nature? It was a truism to say something like that. And truisms often although reveal receptiveness to a bedding of established ideas, it is still necessary to try to establish what he actually meant by it. What then, was Garbett's concept of nature? And how did he define imitation? Once those questions have been adequately dealt with we can concentrate on the last problem: How did Garbett propose to imitate nature?

In his definition of imitation Garbett relies heavily on Quatremère de Quincy as well as the *Discourses* of Sir Joshua Reynolds. His response to Francesco Milizia and through him to Laugier and William Chambers, regarding the paradigm of the "first cause" of architecture as represented by the primitive hut is, as we shall see, rather hostile and dismissive but problematic.

Why is it the highest aim of architecture to imitate nature?

To answer such a question it is necessary to trespass beyond the scope of architectural doctrine. Garbett's ideas rest on the residues of Greek and Jewish thought which persisted in the theological icons developed by Christianity. The attraction of nature was that it evolved in an orderly and purposeful fashion. ² Science, as has been mentioned earlier, was continuing develop laws which expressed that regularity. The application of those laws to human activities would ensure the beauty of all institutions. 3 On top of that, as remarked upon by G. Boas, value has always been associated with things timeless immutable. ⁴ The Pythagorean

^{2.} Tatarkiewicz (1980) p. 294.

^{3.} Boas (1973) p. 350.

^{4.} Boas (1973) p. 347. It is interesting that only the divine, and later, with the arrival of Christianity, the holy, were able to interfere with the immutable. They were able to reverse the effects of natura naturans by raising the dead &c. It is fair to argue that

projection of a mechanically perfect and changeless universe gained immense prestige after the formulation during the seventeenth century of a number of central scientific laws. Natural theology had again, that is after its invention during the middle ages, become very popular during the eighteenth century as result а seventeenth century science. Natural Theology realigned theology in relation to science seeking to use the discoveries of science to prove the existence of a God. Nature, laid bare by science, was confirmed as the manifestation of the will of God and could on that basis be considered the embodiment of His perfection. On that theological authority the extension of His

the concept of genius was a direct descendant of this divine power. Genius, which allows the academician to broaden his field of rules legitimately, is able, and more importantly, allowed to transcend the orthodox; is able to interfere with established systems. Genius is the secular heir of the saint and became divine.

perfections to whatever He produced had automatically to be accepted as beautiful. Beauty, as defined by a scholastically minded Garbett was synonymous with perfection. Nature as the embodiment of legible perfections had to function as a standard, not just for artifice and beauty but for all human action:

Human virtue, Shaftesbury had written, consists in following nature, in the sense that it is a reproduction, within the individual microcosm, of the harmony and proportion so manifest in the greater world.⁵

This sentence sums up Garbett's program in a nutshell.

Doing as nature does

The Socratic notion that imitation constitutes the copying of the appearance of things, was an idea adhered to by Ruskin. ⁶ It was specifically rejected by

^{5.} Willey (1946) p. 70.

^{6.} Ruskin on imitation, see "Lamp of Beauty" in Seven Lamps as well as the first volume of Modern Painters.

Garbett. He conceived architecture as an abstract art. If one were to search nature for a direct model for architecture, none would be forthcoming. That is a conclusion Laugier had come to exactly 100 years earlier. If, Garbett continued, there were direct models in nature for the house, then we should be happy to copy them, that is, reproduce the whole model integrally without any form of abstraction, and use it. The existence of a natural model for a house would constitute a vindication of copyism. But there is no natural house and Garbett is frankly dismissive of those who think they have found one:

Milizia considers the natural model which this art [architecture] is to imitate (and by correspondence with which, its merit is to be judged) to be a particular form of timber hut! - a kind of hut, moreover, which was never yet built, but which the fancy of Vitruvius composed in imitation of a Doric Temple, in order to serve as a short and specious way of explaining (without the trouble of investigation into principles) that

of which common sense required some explanation, however inadequate.(...) But the idea that an art is imitating nature by imitating its own rudest productions, can hardly be stated without exciting ridicule.⁷

Garbett did not reject the reductive logic of Laugier and his followers, he merely rejected their premises. It was not the idea of a connection between origin and essence which was unacceptable Garbett. He was also fond of projecting his own ideas concerning origins and essences onto a mythical inventor. In his case it was Dorus, the inventor of the Doric Order. Instead it was the historical truth of a timber hut as the model for his beloved Doric temple which he simply could not accept. The Doric temple could not have been translated from wood into stone. Puain had ridiculed Greek architecture on that basis and Garbett accepted that the translation from wood into stone would have implied the lowering of the status of the Doric order

^{7.} Treatise, p. 109. On Milizia's position regarding the primitive hut see Rykwert (1981) pp. 65-69.

as having been tainted by copyism. Instead Garbett would prove, positivistically, that the Doric order represented the apotheosis of reason.

Alexandre Guillamot had written that the whole of Laugier's system rested on a hollow foundation that he likes to call nature, because his rustic hut is in no way a work of nature. Every work by the hand of man is a work of art.8 This criticism, confirming the metaphysical divide between nature and (human) culture, was echoed by Garbett when he dismissed Milizia's adaptation of Laugier's hut as one of the rudest productions of art, that is, not of nature. Even though Garbett accepted the notion that the savage lived according to nature, he did not accept that everything the savaae made was automatically natural, or particularly good art. Primitive architecture may exhibit a natural politeness, but such buildings had to be judged on their own terms, that is, with

reference to the level of civilisation which the architect/savage had attained. The perfection of a Greek temple, on the other hand, needed all the thought consideration of a super-culture. The processes of design exemplified by the Greek and the Gothic architects were, Garbett araued, deduced from nature. The Doric temple and the Gothic cathedral were the products of a positivistic logical analysis of nature, an abstraction of nature petrified in stone. The Greek and Gothic represented architects. by individual geniuses such as Dorus and Pericles for the Greeks, and William of Wykeham -the Gothic. Enalish Buonarottifor the represented the vanguard of a supercivilisation.

For lack of a truly *natural* model the whole concept of architectural imitation had to be abstracted:

Architecture, [writes that enlightened critic M. Quatremère de Quincy] should imitate nature itself in the broadest sense, and not any particular natural object,-should

^{8.} Vidler (1987) p. 20. The quote comes from Guillamot (1768).

imitate, not as a painter does his model, but as a pupil does his master-not copying what nature presents but doing as nature does. ⁹

Garbett's concept of imitation as derived from Quatremère de Quincy went all the way back to Democritus who posited that imitation meant copying the way nature functions. ¹⁰

The word Nature traditionally refers both to a process and to the products of that process. During the middle ages the first was called *Natura naturans*. The idea of nature as a creative force was derived from book II of Aristotle's *Physics*, where nature is

10.Tatarkiewicz (1980) p. 267.

defined as that which of itself possesses the principle of motion and repose. The rest was relegated to institution. ¹¹ The products of natura naturans are labelled created nature, or natura naturata which can be further refined to refer to the matter of things and to their form or essence. ¹² Institution as defined by Aristotle would seem to coincide largely with this second medieval category of nature, the codex dei of St. Bernard. ¹³

Raphael versus Rembrandt, part II

According to Garbett, Architecture, as man's institution emulating the processes of nature, had to be the product of deduction and the logical analysis of created nature. But how should one approach created nature? Should one use the forms of created nature in all their infinite variety or should one reduce these variations to their

^{9.} Treatise, p. 110 II faut dire que l'architecture imite la nature, non dans un objet donne, non dans un modele positif, mais en transportant dans ses oeuvres les lois que la nature suit dans les siens. Cet art ne copie point un objet particulier, il ne repete aucun ouvrage, il imite l'Ouvrier et se regle sur lui. Il imite enfin non comme le peintre fait un modele, mais comme l'eleve qui saisit la maniere de son maitre, qui fait, non ce qu'il voit, mais comme il voit faire. Quatremère de Quincy (1832) Vol. II, "Imitation". Garbett continues: ...it is the peculiarity, and should be the boast, of architecture, that it consists in this highest and most difficult kind of imitation alone, and has not like painting and sculpture, any low, narrow, matter-of fact imitation (more properly called copying) in which those who are incapable or unprepared for this only real imitation to take refuge.

^{11.}Tatarkiewicz (1980) p. 291.

^{12.}Tatarkiewicz (1980) p. 292.

^{13.}lbidem.

essence; should the emphasis be on the superficial difference or the underlying resemblance? Should architecture concentrate on particular natures aeneric nature?

The different options personify the antagonism between copyism and imitation proper as Garbett understood it. The opposition was again illustrated by the historical antagonism between those who admired Raphael and those who admired Rembrandt. The opposition of these two artists had also played a part in the development of the concept of the picturesque. Garbett quoted Ruskin on their ideological polarity:

"There are (...) two, in some sort opposite schools, of which the one follows for it's subject the essential forms of things, and the other the accidental lights and shades upon them. (...) the one is always recognised as pure, and the other the picturesque school." 14

This opposition, which Reynolds would have recognised his own, depicted as Rembrandt as the immortal enemy of Raphael. Any enemy of Raphael, was of course an enemy of Reynolds, and any enemy of Reynolds was in turn an enemy of Garbett. Here is Garbett quoting Reynolds:

"...we criticise Rembrandt and other Dutch painters who introduced into their historical pictures exact representations of individual objects, with all their imperfections..." 15

This was a symptom of the value traditionally attached to the changeless and immutable. The variety exhibited in particular natures, individual people etc., was considered to be the result of external factors and for some reason not natural. In a perfect world the processes of nature would only bother with the creation of genera which would not subsequently be forced to divide further into individuals.

^{14.} Treatise, p. 106-7; Ruskin, Seven Lamps, "Lamp of Memory," § XI-XIV, p. 215 f.

^{15.} Treatise, p. 111; cf. Reynolds (1907) p. 99.

Variety, although sometimes glorified as a sign of God's infinity, was not helpful to the struggle towards order and perfection:

Peculiar marks writes Reynolds and quoted verbatim by Garbett, I hold to be generally, if not always defects...Peculiarities in the works of art are like those in the human figure; it is by them that we are cognizable and distinguished from one another; but they are always so many blemishes, which, however, both in real life and in painting cease to appear deformities to those who have them continually before their eyes. In the works of art, even the most enlightened mind, when warmed by beauties of the highest kind, will by degrees find a repugnance within him to acknowledge any defects.¹⁶

This rather dictatorial attitude, rather common in neo-classical circles, was typical of an idealising tendency inherent to all utopian thinkers. They set their own, often rather naive conception of perfection, up against the world they perceived around them and judged the latter hopelessly fallen and imperfect. The order expressed by mathematics, on the

other hand, was deemed eternal and therefore perfect. On Platonic and Pythagorean authority these men sought to recreate the ideal in geometric and moral regularities in which the infinite variety of the creation had to be subdued.

The Democritan concept of imitation as adhered to by Quatremère de Quincy was further conditioned to Garbett's purposes by the addition of Aristotle's definition of imitation as adhered to by Reynolds. Aristotle pointed out that things can be presented both more or less beautiful than they really are. An idealising art had to project a world as it could and ought to be. Within such a program, imitation had to limit its operations to seeking out the desired characteristics of things which were *ipso facto* believed to be generic, typical and essential. ¹⁷ Here is Garbett, yet again quoting Reynolds:

^{16.} Treatise, p. 120 quoted from Reynolds (1907) p. 79.

^{17.}Tatarkiewicz (1980) p. 268.

HOW CAN THAT BE THE NATURE OF MAN, IN WHICH NO TWO INDIVIDUALS ARE THE SAME? 18

Nature for Garbett and Reynolds was not matter as it was, but essence as it was hoped to be:

That which is common to a whole of a given class or kind of objects, is called their nature.¹⁹

Imitation then, as Garbett understood it, was defined as a process, not of assimilation, but of seeking out the cause of generic form in nature. Generic form could be defined by its efficiency in relation to the carrying out a particular function.

Hercules and the principle of generalisation

The difference between copying natural objects and imitating nature, lies in the

introduction, in the latter case, of a principle of generalisation.²⁰

The artist had to consider how a natural process, in ideal conditions, would produce a useful form. This form would exude a character appropriate to its function. Proper imitation stood for the generalised analysis of form appropriate to situation and function in nature. This is where Garbett approached the Platonic theory of Forms. The permanent idea or absolute form, well removed from the sublunary world, could only be approached through a process of rational reconstruction or deduction aided by the close observation of phenomena in nature. But nature, as she presents herself to us, is full of faults and unique irregularities caused by time and the passive suffering of violent circumstance. As such nature had to be projected back to her original perfection.

To achieve a closer approximation to that ideal, the simple projection of the

20. Treatise, p. 110.

^{18.} Treatise, p. 111, Reynolds (1907) p. 99.

^{19.} Treatise, p. 111.

actual towards its generic idea was not enough. As far as this was concerned, Garbett admitted Reynolds' theory on the generalisation of nature to be incomplete. It was not enough to merely generalise the object under scrutiny, one had to somehow improve upon it at the same time. The actual has to be exaggerated into the ideal. To extend extant nature to an ideal, Garbett decided that the artist would need to exaggerate those generic qualities, to extend them into perfection. Reynolds, he argued, had not taken account of the methods of the Ancient Greeks sculptors:

Hercules was not, as [Reynolds] supposed, the central form of the class represented, or, in other words, the simple embodiment of what was common to the class of strong men: if so, it would merely have represented a man of moderate strength. The object...was to represent superhuman strength; and this required a more refined and extensive generalisation: it required an investigation and analysis, not only of whatever was common to all the strong,

but also whatever distinguished them as a class from the rest of the species, or from the class most opposed to them....This was necessary, in order that the general differences distinguishing the central form of strength from the central form of humanity might be exaggerated. ²¹

Sir Charles Bell's studies in physiognomy had tried to explain the apparent nobility of facial and bodily features in Greek sculpture which were thought to have transcended the natural:

these unnatural peculiarities [the deviation of the antique from the natural with regard to the facial angle] were allowed by every eye to be beautiful, and expressive of a singular intelligence. ²²

Had the human species become so degenerate since the collapse of Greek culture? Were the Greeks closer to the

^{21.}lbidem.

^{22.} Treatise, p. 113.

unfallen state of man? Had their sculptural traditions descended directly from Adam? The answer to the riddle was given by Sir Charles Bell. The features of Greek men as sculptured did not necessarily conform to real live examples but were the result of a careful process of exaggeration of exactly those qualities in man which distinguishes him from the lower animals. ²³

If all this was indeed so, where lay the division between exaggerated imitation and caricature? This was a concern which had been voiced by both Hogarth and Reynolds. But the duality between the arbitrary and the necessary offered escape, the same duality which had separated the sublime from the picturesque and power from delicacy could be used to divide caricature from exaggeration. Proper imitation confined itself to the generalisation and careful exaggeration of the central form of the object, selecting all that was necessary to that form to fulfil its

23.cf. Bell (1806) esp. p. 32; *Treatise*, p. 112-113. On Bell see Cummings (1963).

function. Caricature on the other hand the accidents focused on and circumstances pertaining to the object. The first was seen as a form of morally healthy idealisation, as exemplified by Raphael and the Greek sculptors. The second was at best the accurate representation of things as they are in real life with all imperfections and at worst the exaggeration of those imperfections. It was picturesque and as such symbolised by the morally effete Rembrandt. 24

The entasis of force: the Greek column erupts from nature

One of the most ingenious and enjoyable arguments in the *Treatise* is where Garbett tried prove the origin of the Doric column as the direct outcome of his rational principles. I hope the reader will forgive me for quoting his arguments in full including the general preamble working up to the actual example. The purpose is to rehearse some of the points already discussed and show

^{24.} Treatise, p. 111.

how various elements such as the deduction from nature, the exemplification by way of Greek architecture, the process of imitation are treated as an integrate argument:

If nature had produced complete buildings, true architecture would consist in a generalised imitation of them, or of a portion of them, viz., all such as were destined to the same purpose as the building in hand. Though nature has not done this, she has produced objects, and parts of objects, agreeing, in certain points of their destination or their expression, with buildings. Is a building or a member, then required to have a particular character or expression? There is only one way of giving it, viz., by collectively examining all or as many as possible, of those works of nature which have this particular character,- all which agree in this point (but the more widely they differ in other points the better),- by analysing them, and extracting that which they have in common, carefully rejecting everything in which they differ,

these are proved by that very difference to be things non-essential to the character required; but in whatever point they <u>agree</u>, these constitute nature's mode of expressing that particular character, and it is <u>the only mode</u>. When thoroughly eliminated and refined from all things not essential to it, then, and <u>not till then</u>, it may be pushed further than any work of nature, and thus give the required expression more strongly, as well as more perfectly (with less mixture), than nature ever gives it. ²⁵

As soon as the premises and principles were set in place Garbett began with the historical exemplification itself, projecting his own reasoning into the mind of Dorus:

We want a column, that is, a long body, intended for transmitting pressure to or from a flat surface. It evidently matters not whether the column be pressed against the surface or the surface against it, nor in what position it be placed. A strut is a column, only placed horizontally or inclined. The expression we want to give is that of fitness to receive this pressure.

^{25.} Treatise, p. 113-114.

The last sentence was central to the argument. Form expresses or *symbolises* function. On that basis Garbett could proceed to try and identify the column in nature, dismissing the traditional models:

Some nations have copied columns from trees, and some from men, but neither of these are imitating nature; on the contrary, they are most unnatural, since nature has not made either a tree or a man to serve the purpose of a column. Are there, then, no columns in nature? Certainly there are. The limbs of all animals are columns according to the above definition, the surface against which they press being the ground. The human arm uplifted to support a weight is a column; and when pushing horizontally against a wall, it is a horizontal column or strut.

We have arrived at the natural model, now to apply the process of formal analysis according to the principle of generalisation as advocated by Reynolds and the principle of exaggeration as advocated by Bell:

comparina these various natural columns, to discover what they have in common, we find, first, that their transverse section has roundness, therefore we make the artificial column round. Second, we observe that they vary in length from four to ten times their areatest diameter, but that in animals remarkable for power and majesty, they do not exceed six times the said diameter. Therefore, when this character is aimed at, the columns are confined to a lenath of between four and six diameters. third, With regard to their longitudinal outline or profile, they have a general diminution from their origin to the ankle or wrist, i.e. to a point near the surface against which they are applied. Therefore we make the artificial column diminish from its origin to a point near the surface to be sustained. This diminution is in a contrary direction to that of the legs of animals or furniture, because they issue from the object to which they belong, and apply themselves

against a surface below; but the leas of a fixed structure should issue from the substructure, and apply themselves to the support of that above; otherwise they would appear to belona the superstructure, and form with it one mass, distinct from that below, and made to be moved about like a table. (...) Fourth, Another circumstance common to all models is, that the diminution above noticed is not regular or in straight lines, but tends, in the majority of cases, to convexity, i.e. diminution, at first slow, becomes more rapid towards the wrist or ankle; and this is accordingly imitated.(..) Fifth, We observe it to be a part of the nature of limbs that, after passing the smallest part, there is a rapid swelling to form the extremity (hand or paw), which is what in the column, we call its capital. This protuberance is, in nature, commonly eccentric with regard to the axis of the limb, projecting most on the side towards which the animal looks, and least often (or often not at all) on the opposite side. But this eccentricity is least in the most powerful animals, and is properly omitted in the column for two reasons: either as an exaggeration of that which distinguishes the most powerful models, i.e. those most displaying a quality intended here to be expressed; or else it is omitted as having an obvious relation to a property not intended to be expressed, viz., locomotion: for the foot always projects most on the side towards which it is to move; and as the capital is not to move, there is no natural example for its projecting on one side more than another. Sixth, with regard to the outline of the extremity, we find it to be at first concave for a very short distance, then becoming very slightly convex, and as it spreads, the convexity slowly increases, till, at the greatest protuberance from the axis, it rapidly curves round and returns inward to a small distance. Such are the points common to the outline of every animal extremity, when applied against a flat surface; and such are those which constitute that wonderful specimen of generalised imitation, the original Doric column,-that form on which no subsequent efforts have been able to

effect any improvement in fitness of expression to its particular purpose. ²⁶

If the Doric column is a stroke of genius, this bit of retrospective reasoning by analogy to nature is certainly not without its qualities; it is compelling to an extent which even Vitruvius' ideas about trees and men, which are perhaps based on Greek reconstructions, are not. The explanation is completely consistent and may, by itself, stand as the justification of Garbett's title to the *Treatise*.

The idea was not completely original, raising questions as to the true extent of German influence on Garbett's thought. Such an approach to nature and Greek architectural thinkina had been anticipated by Alois Hirt and was more fully worked out by C.G.W. Bötticher. Garbett usually mentions his sources rather conscientiously for the time. This in itself raises problems with regard provenance of the idea. Garbett's analogy

may possibly have been suggested to him through Alfred Bartholomew's intriguing drawings of the human body to illustrate the effects of stress and pressures in a building. Apart from that there are a number of examples where caryatids, rather than supporting the architrave on their heads, carry it with their arms, illustrating Garbett's arguments. Another vaguely possible source of inspiration, unmentioned by Garbett but relevant to both his ideas on iron construction as well as his interpretation of organic form is Wiliam Vose Pickett's A New System of Architecture of 1845 which dwelled on the connection between the form of animal bones and their consumption of stress. 27

Eclecticism: and the commentary on nature: doing as Raffaelle did

If generalised nature was proposed as the model for architects to imitate, this did not mean, as the above example makes perfectly clear, that the products of

27. Collins (1965) p. 135-138.

^{26.} Treatise, p. 115-117.

civilisation had to be neglected as a consequence. Far from it:

In the study of nature he must also study the commentaries on her, i.e. all previous productions of his art. All these are so many annotations on Nature's great and most difficult book; and he who attempts to read her without their assistance, simply sets up his own wisdom against all mankind. ²⁸

Imitating nature does certainly not imply the anti-intellectualist ideas of Diogenes and Rousseau. That was what Laugier and Milizia had, in Garbett's mind at least, tried to reduce architecture to: the imitation of its own rudest productions. The student was urged to study history as a control to his study of nature. A thorough knowledge of history would prevent him from reinventing a wheel which was bound to be very much worse than the one that had evolved slowly by a collective, or at least, consecutive effort. Here Garbett was advocating a

conservative attitude to design, a reflective eclecticism. ²⁹ Again Raphael was the icon of the perfect artist in this respect, again it was Reynolds who introduced him into Garbett's theory:

it is from his [Raphael] having taken so many models [imitating all the styles then known at once, and without their peculiarities], that he became himself a model for all succeeding painters -always imitating, and always original. If your ambition, therefore, be to equal Raffaelle, you must do as Raffaelle did, take many models, and not even him for your guide alone. 30

Robert Adam, referred to as that architect in the last century was strongly condemned for having allegedly only used Diocletian's palace for his model. ³¹ Garbett's accusation is not only wrong but also ironic

29. Collins (1965) p. 17.

28. Treatise, p. 118.

^{30.} Treatise, p. 121. Reynolds (1907) p. 81.

^{31.} Treatise, p. 121.

as Adam is now considered to be the eclectic par excellence and one who would appear to conform closely to the above definition of the ideal artist.