G.E. Moore's *Principia Ethica* and the Complex of Architecture
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G.E. Moore's *Principia Ethica* of 1903 marks a certain starting point of analytical philosophy.[1] Its concern with analytical propositions, the pushing of analysis to an end point, its rigorous style, the clarity of its arguments and the precise demolition of the less-than-rigorous work of preceding philosophers provided a template for how twentieth century Anglo-Saxon thought might escape Kantian idealism and Hegelian dialectics and forge its own path. It set the scene for a style of philosophy that prioritised good argument above authority. In this, it laid out for itself the whole of philosophy as an almost a-historical source of discussion. Moore was not much interested in the progression of thought, or the idea that a particular thought is tied to a particular culture or realm of ideas specific to a certain time and place. Rather, any idea, from Plato onwards, occupies the same intellectual space and is to be analysed in itself as more or less valid compared to the a-temporal logic of philosophy. Philosophy is posited as valid for all times, since it concerns and uses logical thought, which is a-temporal. Moore already uses the strategy found, for instance, in Bertrand Russell's *History of Western Philosophy* of 1946, where all philosophies are considered on the same plane or the same level, to be compared one with another, and their logic and validity weighed in the balance compared to the position of the writer.[2]

The position of the writer, in turn, is given a particular weight, and the voice of the writing has a particular tone. What distinguishes this tone is a certain security, or sense of assurance of the validity of the position taken, of the logic used to support the arguments. Analytical philosophy tends to be positive in the sense that it is concerned with the clear expression of philosophical thought, starting from sense impressions, and applying ways of thinking that could broadly be called scientific. But it also is positive in the sense that it gives itself a secure and therefore positive position. This contrasts with other philosophical traditions that are more self-reflexive and self-doubting, where the reflection upon the philosopher's own position not only begins to call into question that position in a non-positive manner, but also introduces reflexive complexities into the argument. These reflexive complexities are antithetical to the analytical, positive way of proceeding. They tend to undermine a linear trajectory of thought in the sense that thought will turn back on itself. A proper, analytical mode of though, however, does not turn back on itself – it proceeds in linear fashion.

This tone and method of proceeding characterises *Principia Ethica*. The book is a 'general enquiry into what is good',[3] and that enquiry is to occur by means of analysis. What does it mean to analyse, and what can be analysed? Moore considers analysis to be the breaking down of things into their more simple elements. The task of the philosopher is to take complex things and show what they are made up of. The rigour of Moore's thought is evident in the first pages of the book, where he quickly draws two succinct and apposite conclusions from this. The first is that things are generally complex. In order to

be able to analyse something, that thing must have a degree of complexity to it that allows it to be taken to pieces by philosophy, and its parts put on display. A simple thing is not amenable to analysis. Which in turns means that we must be careful, according to Moore, to ensure that we do *not* try to analyse simple things.

The second conclusion he draws derives from the first and from the nature of analysis. As I noted above, analytical philosophy is positive in the sense that it does not introduce reflexivity into the argument or the method of procedure. There is no turning back of thought upon itself. This is expressed clearly in Russell's theory of types, which he was working out with Alfred North Whitehead at around the same time as Moore was working on *Principia Ethica*, and which forms a central thesis of their *Principia Mathematica*.[4] The theory of types looks at the logical problems that arise when thought circles back on itself and starts to make state-ments about itself. This is most clearly expressed by the paradox of the person who says, 'I am lying.' Here, the reflexive reference back to oneself allows such paradoxical and illogical phrases to exist. The theory of types introduces a logical hierarchy which outlaws such reflexivity by stating that when a reference is made to the totality of something (the 'I am' in the above phrase), this reference must be made from a *different* logical location in the hierarchy to that of which the statement is made. These different locations in the hierarchy are called types.[5] The paradox of 'I am lying' arises because this theory of types is not adhered to, and a statement is made that refers to the very position from which that statement is uttered. The theory of types therefore encourages a linear procedure of thought by outlawing this sort of reflexivity.

When analysis proceeds in this linear way, starting from complex things and breaking them down into their constituent elements, disallowing any reflexivity, the consequence, for Moore, is

that an end-point of the analysis is reached. This end-point is where the analysis reaches something simple; that is, something that is not in turn capable of being analysed or broken down into smaller elements.

I would like here to make two points about this procedure of analysis that delves down to simple things. The first is to relate it to two possible other ways of dealing with what happens when we analyse complex things. One other way of characterising what happens is precisely to ignore Russell's theory of types and to allow that instead of simple things being at the end of the analytical process, what we find is something like the paradox of the one who says 'I am lying.' We could call this a sort of abyssal tactic, a tactic of the *mise en abyme*. One way of contrasting analytical philosophy with certain strands of continental philosophy is to draw this distinction between analysis down to simple elements, and analysis down to the paradox or aporia of the *mise en abyme*. For analytical philosophy, this particular habit of thought found in continental philosophy is unacceptable, and leads to a lack of clarity.

The second way of dealing with what happens when we analyse complex things into their compo-nents is that the process never stops. In that case, we would find not a simple thing at the end of the analysis, nor a paradox, but rather an analysis that in principle is infinite. What is found is a nesting within nesting arrangement. What is complex is made up of what is also complex, and that in turn complex, to infinity. We could call this a sort of logic of multiplic-ities. What is complex is a multiplicity which in turn is made up of other multiplicities, and this nesting of multiplicities goes on to infinity. In comparison with Moore's position, this second possible response to what happens to analysis at the limit is unacceptable, and provides another point of contrast between habits of thought that can be found in continental philosophy and analytical philosophy. But in respect of this distinction, things are more complex. Willard

Van Orman Quine in his 1968 lecture *Ontological Relativity* states, from firmly within the analytical tradition, that all theories rely on a 'background theory', and that this background theory has 'its own primitively adopted and ultimately inscrutable ontology'.[6] The reason the background ontology is inscrutable is that it reaches simple objects that can only be dealt with by 'something like pointing', and this pointing is precisely what, for Quine, limits the 'infinite regress' of analysis.[7] But for Quine this only occurs 'in practice'. In principle, and as the title of his essay implies, there is an inherent relativity amongst multiple theories such that, just as with Einstein's general relativity regards position and velocity, no one theory can be established as absolute, which in turn means that 'it makes no sense to say what the objects of a theory are'.[8] What we see here is an example of how analytical philosophy develops beyond its beginning with Moore, since Quine is here calling into question the reality of Moore's simple unanalysable things.

Leaving aside such future developments, Moore's procedure of an analysis that delves down to simple things – and this is the second of the two points I wish to make, in order also to begin to relate the discussion to architecture – derives ultimately from Aristotle's *Physics*, where he states in the first paragraphs:

> Now what is plain and obvious at first is rather confused masses, the elements and principles of which become known to us later by analysis. Thus we must advance from generalities to particulars; for it is a whole that is best known to sense-perception, and a generality is a kind of whole, comprehending many things within it, like parts.[9]

This Aristotelian principle of advancing from generalities to particulars was invoked early on within architectural theory. As John Onians points out in *Bearers of Meaning*, Francesco di Giorgio, in the much-improved second version of his architectural treatise, splits it 'into seven sections called *trattati*, with the first devoted to "general principles" and the next six to "particular" ones, "following the opinion of Aristotle in the *Physics*, where he instructs us that in the sciences it is necessary to proceed from universals to particulars"'.[10] Francesco di Giorgio is here only making explicit what had guided the earlier theoreticians of architecture – Vitruvius and Leon Battista Alberti – in the structuring of their treatises. It is therefore possible to make a direct connection between the methods and principles of analysis that Moore uses, and the origins of architectural theory. Architectural theory started by proceeding in analytical fashion, splitting, in Aristotle's terms, what is ostensibly 'plain and obvious' but in fact 'confused', into its constituent particular elements. Why are these ostensibly obvious things in fact confused? For two reasons: firstly, because they are 'known to sense-perception', and sense perception is necessarily imprecise and confused; and secondly, because they have not yet been subject to analysis. I noted above that analytical philosophy is positive in its approach. This point can be clarified further by reference to the above quotation from Aristotle. A positive approach to knowledge has the following characteristics: it proceeds *scientifically*; it proceeds from *sense perception*; and it proceeds by means of *analysis*. That this is a scientific approach is clear from the context within the introduction to Aristotle's *Physics*, a book that establishes European science. That it relates to sense perception, as the thing from which one starts, is explicit in the text. As I showed above, Quine follows something like this principle by saying that in *practice* we have to point to something in order to establish a background theory as provisionally effective – that is, we have to invoke sense perception. Moore does the same thing in *Principia Ethica* when he talks about the colour yellow as being one of these simple things which we can only point to but cannot analyse, but in contrast to Quine's later analytical position, he gives an absolute rather than provisional validity to this.[11]

To continue this architectural digression before returning to Moore: certain inherent issues are therefore raised by virtue of this method of creating architectural theories. These inherent issues follow from the character of the method. I outlined above three methods of dealing with the question of the end of analysis. The first of these is Moore's analytical method that I have just pointed to: the analysis reaches a simple thing (such as yellow) beyond which it cannot go. The aim of analysis is to reach such points. The second and third of these methods (although method may not be the correct word here) are alien to Moore's analytical philosophy and take respectively the reflexive *mise en abyme* approach and the infinite nesting, or multiplicity approach. Now it is interesting to note that a common trope of traditional architectural theory is to invoke some simple origin of the discipline. This is evident, for instance, in Vitruvius and Alberti, where the origins of architecture are posited in some primordial situation such as the need to provide shelter, or the gathering of people around a fire.[12] It is evident in Abbé Marc-Antoine Laugier's primitive hut.[13] It is evident in Gottfried Semper's similar invocations of fire and the hearth in *The Four Elements of Architecture*.[14] All these are myths of the origin of architecture; they are attempts to sort out the issue of where it starts, temporally speaking. Equally, where the *analysis* of architecture can stop, logically speaking. They address the problem: if our task is analysis, at what point does that analysis begin or end? Furthermore, the myth has necessarily to invoke a simple or primitive situation. The primitive hut, the primitive situation of the gathering around the fire, the primitive and straightforward need for shelter: these may *appear* to have a historical logic to them, but, of course, they do not, in the sense that there is no possible historical evidence for these myths. Rather, they are fulfilling a logical need that flows from the premise that a discussion of architecture must proceed in an Aristotelian and analytical manner. It is only rarely, and only in late twentieth-century architectural

theory, that either of the two other tactics for dealing with the end (or beginning) of analysis make their presence felt within architectural discourse. In that sense, it can be said that architectural theory, on the whole, has a close although largely unthematised relationship with an analytical tradition of thought.

The other issue I wish to raise briefly at this point is the status of analysis in relation to architectural production. The analytical tradition in philosophy, which Moore's *Principia Ethica* exemplifies, starts from complex things that are to be broken down into their elements, until something simple is reached. This is a scientific activity, in the sense that this method is outlined in Aristotle's *Physics* and from there influences the whole development of European science. The task of architectural production is different to this; it is a question not of breaking down complex entities, but rather of making those complex entities in the first place. It is a question of synthesis, not analysis. Or to put it in Aristotelian terms, it is a question of *poesis* – a question which he addresses in the *Poetics*.[15] Of course, the *Poetics* also proceeds by analysis of poetry into various types. But the question of the synthesis which poetic creation requires is addressed by means of the theme of the unity of the plot and the necessity that, just as with other arts, poetry must create a unified whole to which nothing can be added or removed without disturbing its perfection.[16] This organic stipulation is taken up by Alberti in chapter five of Book Nine of *On the Art of Building*, where he references Aristotle and notes that a great work of architecture is one composed like an animal 'following nature's own example' such that nothing can be added and nothing removed without spoiling its perfection.[17] I think it is worthwhile noting in relation to this whole theme of parts, and the perfect and organic wholes into which they must be synthesised by the architect, that the problem of an organic whole perhaps only arises when the premise of an analytical structure to thought has already been accepted. In that

sense, it may be necessary to be wary of the ease with which architectural theory tends to transform an instrument of analysis into an instrument of production.[18] Perhaps the question of the creation of architecture (or anything new) needs to be looked at on its own terms.

I stated above that, for Moore, an end-point of analysis is reached when something simple is found or understood; that is, something that is not in turn capable of being analysed or broken down into smaller elements. He gives the example of yellow as something simple which cannot be further analysed and instead has to be pointed to in order that it be understood. It is central to Moore's argument in *Principia Ethica* that the good is, similarly and essentially, something simple. This is a conclusion that he presents in the first chapter of the book, admitting that this may appear to be a disappointing result in the context of a discussion about ethics. In fact, this point is crucial to an understanding of the nature of ethics, because what Moore wants above all else to falsify is what he calls the 'naturalistic fallacy' about the question of the good:

> a mistake of this simple kind has commonly been made about 'good'. It may be true that all things which are good are *also* something else, just as it is true that all things which are yellow produce a certain kind of vibration in the light. And it is a fact, that Ethics aims at discovering what are those other properties belonging to all things which are good. But far too many philosophers have thought that when they named those other properties they were actually defining good; that these properties, in fact, were simply not 'other', but absolutely and entirely the same with goodness. This view I propose to call the 'naturalistic fallacy'.[19]

The naturalistic fallacy is the habit of believing that something else can be put in the place of the good. In other words, and to look at it from the other direction: a judgment about what is good has to consider simply that very question: is it good? It cannot substitute for that question another question. In that sense, the judgment about what is good is a primitive judgment, and comes at the end of analysis rather than at the beginning. No analysis, strictly speaking, of the good can occur, for the same reason that no analysis of yellow can occur; all analysis will have preceded this point. It becomes apparent that one important aspect of analytical philosophy is that it is and should be conscious of its limitations. This is a characteristic it shares with all positive science, in the sense that a science, properly speaking, defines the limits of its knowledge and agrees not to attempt to go beyond those limits.[20] So, for instance, it can be said that the modern forecasting of weather is a science not only because it is capable of predicting, within certain boundaries, what the weather will be tomorrow, but also because it acknowledges that, as a science, it *cannot* predict what the weather will be like in a month's time. For science, this setting out of limitations is not a negative aspect but rather a positive aspect of its self-understanding.[21] The same goes for Moore's definition of the good as unanalysable; what may appear to be a negative limitation in fact allows Moore to say something important about the nature of ethical judgments – namely, their irreducibility. It is not possible to reduce an ethical judgment to some other criteria. Or rather, this *should not be done*. There is an ethical call here to *avoid* the naturalistic fallacy and therefore to acknowledge, in any judgment about what is good, that this judgment cannot and must not be reduced to other criteria. It does not take very much thought to realise the importance of this point; it represents in abstract, for instance, the distinction between the question of *law* and the question of *justice*. Law is precisely the reduction of questions of the good to sets of normative rules; but beyond that there is always the question of justice, which represents the irreducibility of the good to such rules.

Now this seems to me to raise important issues in relation to architectural judgments. When are

architectural judgments made? They have to be made all the time both in relation to architectural production and in relation to architectural criticism. They have to be made by those who are designing architecture (commonly, architects), by those who then allow architecture to exist (commonly, disciplines such as town planning), and by those who subsequently critique architecture. They have to be made in the academic studio, where judgments have to be made to guide students towards what is good design, and then to assess their work. It is easy to see that there is a whole history to be written of how the question of what is good architecture gets reduced to other criteria. These criteria are commonly stylistic: it is common to find within the history of architectural criticism that good architecture is equated with a certain, often contemporary, style. As commonly, the criteria are technical, not only in the sense that architecture is required to fulfil some overtly technical requirements, but also in the sense that attempts are made to codify what will constitute good architecture – for instance, within planning systems. Often, criteria are implicit rather than explicit: an example of this is the use of photography in architectural criticism, whereby what photographs well and presents a good visual aspect is judged to be good *per se*. Sometimes the criteria are philosophical, as when Alberti states that architecture is something that has an *idea* in the sense that the Aristotelian perfection and wholeness of great architecture (nothing to be added or removed) has to be preconceived and determined in the mind of the architect.[22] For Alberti, an architectural judgment about the good lies behind the very definition of architecture, since this is what distinguishes it from mere building.

What Moore's critique of the naturalistic fallacy implies is that this reduction of what is good in architecture – or what is good architecture, or what *is* architecture – to certain criteria other than the outcome of a judgment about the good, is not to be trusted. It is obvious that for pragmatic reasons it is

necessary to give criteria in order that judgments can be made. What Moore is telling us is that, ultimately, the judgment about what is good is a judgment which has to stand alone, unsupported by the scaffolding of rules, styles, or ideas. This implies in turn that to say that a work of architecture is good has, potentially, a validity in itself that is difficult, or impossible *in principle*, to analyse out into other criteria. Yes, we can constructively analyse such matters as the historic and biographic conditions that give rise to a judgment of the good, but in principle the judgment itself stands alone. Looking from the other direction of the production of architecture, we can say that the production of a good work can never be pre-determined by way of rules or criteria, assuming that we acknowledge that a – possibly ongoing – self-critical judgment about what is good is a necessary part of creative production. That is to say, if pre-determined criteria are used in the action of designing architecture, then we can be sure that the best architecture is not being created. Moore expresses this in general terms when he points to the limitations of duty – that is, the limitations of acting in accordance with certain criteria: 'it follows that we never have any reason to suppose that an action is our duty: we can never be sure that any action will produce the greatest value possible'.[23]

Is there perhaps a confusion here between different meanings of the word good? Are we mixing up two different things – good as in a properly ethical judgment, and good as in an aesthetic judgment? One interesting thing about Moore's philosophy is his habit of evening out the implied ontology. He tends to treat all instances of the word good as referring back to one common thing, as if the name has an inherent power. It is as if the things that may be called good are not to be distinguished one amongst the other as regards their ultimate characteristics. They are all of one kind. Thus, in principle, it seems that for Moore ethics treats of *all* aspects of the good, be they moral or aesthetic questions. It does not matter whether we

are asking about the good of something beautiful, or the good of something moral: in both instances, the unreducible thing we are asking about is the same thing, the same good; and this good is an 'unanalysable object of thought'.[24] Perhaps, indeed, its unanalysable quality is what allows it to pass across the boundaries of the beautiful and the moral; perhaps its apparently nominal quality is actually its resistance to analysis.

Principia Ethica ends with an extraordinary chapter on the question of the ideal. This Moore defines as not just the question of what is good (which the whole book addresses), but the question of the *ultimate* good. What, above all else, is ultimately good? Moore's answer revolves around a discussion of the concept of 'unified' or 'organic wholes'. While the good, in itself, is simple and unanalysable, the things that we can judge to be good are inherently complex, and are therefore things that can be analysed in themselves. But because the good is simple and unanalysable, and because there is no recourse to the naturalist fallacy whereby it would be possible to give criteria for the good, the judgment about what is the highest good or what is ultimately good in turn becomes something that can merely be asserted rather than explained. One of the more controversial aspects of the book is that Moore baldly states, in this last chapter, that the two highest forms of good are the enjoyment or contemplation of beautiful objects, and the pleasures of human intercourse.[25] The point I made above holds: he sees no intrinsic difference between moral good and aesthetic good; both are the rightful topic of ethics, and indeed the consciousness and contemplation of the beautiful is ranked above types of moral good that do not consist in the pleasures of human intercourse. And he does not attempt to justify his judgment about these two highest forms of good: indeed he makes the point that this judgment appears so obvious as to run the risk of 'seeming to be a platitude'.[26]

But Moore's uniqueness here lies in the manner in which he defines these ultimate good things. The fact that they are complex is taken to be a matter worthy, in itself, of analysis and philosophical investigation. The nature of this complexity is outlined in the very terms that Moore uses: the *enjoyment or consciousness of* a beautiful object, and the *pleasures of* human intercourse. It is the *intermixture* of the subject who is contemplating the beautiful (or fellow human) *with* the beautiful thing (or human) itself which is of concern to Moore. It is this intermixture that makes up an organic whole, it is this intermixture that is the object of his analysis, and it is this mixture that is, for him, good. The subject, or the beautiful object, are merely *parts* of this unified or organic whole. This means that, in themselves, the subject, or the beautiful object, or any other aspect of these wholes which Moore has identified, are not necessarily good, or at least do not have anywhere near as much good as the whole of which they are a part. This is a resolutely non-objective notion of the goodness of both a moral situation and the goodness of a beautiful thing, because this thing which is beautiful is stripped of its objective qualities (i.e. any quality it has as an object *per se*) and instead given a *relational* reality. As Moore says:

> [the] mere existence of what is beautiful has value, so small as to be negligible, in comparison with that which attaches to the *consciousness* of beauty. This simple truth may, indeed, be said to be universally recognised. What has *not* been recognised is that it is the ultimate and fundamental truth of Moral Philosophy. That it is only for the sake of these things – in order that as much of them as possible may at some time exist – that any one can be justified in performing any public or private duty; that they are the *raison d'être* of virtue; that it is they – these complex wholes *themselves*, and not any constituent or characteristic of them – that form the rational ultimate end of human action and the sole criterion of social progress: these appear to be truths which have been generally overlooked.[27]

Moore follows through the implications of his ethical mereology (the branch of philosophy dealing with the question of parts and wholes) by insisting that the value of the whole is *not* related to the value of the parts in any way. So a whole which is very good can be made up of parts which, of themselves, do not have anything particularly good about them. An example of this is the part that we call material. Moore states that *in itself*, material does not have anything good about it; it is not something about which an ethical judgment would commonly be made. In itself, it is mundane. But in combination with other things, where it helps to make up an organic whole of a certain type, it contributes to the goodness of that whole thing, and indeed without that material quality – in itself of no or little value – the organic whole would not have by any means the same amount of goodness about it. Some parts that individually have little or no value in themselves can and do combine to create something of great value: the material and bodily qualities of things are a vital component of beauty, even though material considered *in itself* does not have any inherent value.[28]

One of the parts of an organic whole that Moore considers is the part called existence. (Again, we see here a sort of flat ontology, whereby things that are usually kept in separate realms of thought are, in Moore, given equal weight. A part of a complex whole can for him be existence itself, or the lack of it; it can be the consciousness which someone has of something; it can be that thing considered only as an object; it can be the material or the colour; or it could be something more ephemeral still such as the memories one has of something, or the history of the object or situation. All these things are potentially and really parts or let us say particles of these larger organic wholes that are given value not because these particles have value, but because their *intermixture* does.) He considers the extent to which the real existence of something contributes to the goodness of the whole

of which it is a particle. The example he gives is the representation of a landscape in a painting, as compared to the landscape itself. Both these things, in themselves – in their objecthood – have no or little intrinsic value. So a landscape, in itself, or a painting, in itself, have little value. What is valued is the larger whole which consists of the painting or the landscape in combination with the consciousness which someone has of either of these things. Moore then asks what implication the existence of the landscape has for these organic wholes, since in the instance of the painting the landscape is not in existence, whereas in the instance of the landscape it is. His answer is that although existence *per se* is not something of great value, when existence is added to a good whole of which it may be a part, this addition increases the good of that organic whole. This means that the experience of a landscape is a higher good than an experience of the represen-tation of a landscape.

It is of course possible, from our vantage point, to criticise this logic by pointing out that Moore is not comparing like with like, and that in fact what should be considered in the case of the painting is not the non-existence of landscape it represented, but rather the existence of the painting itself as a work. This however does not affect the point I wish to make here, which is that Moore is valuing organic wholes which consist of the intermixture of a person with an environment or an object in existence more than intermixtures where the contemplated thing is represented rather than really existing. This implies a general depreciation of representational situa-tions relative to non-representational situations.

I wish to argue here that Moore's notion of the organic whole, together with his concern for the goodness of human intercourse (another organic whole, consisting of more than one subject), are potentially inherently *architectural* thoughts with significant implications for the theory and ontology of architecture. Moore's emphasis on the

intermixture of the work and the subject, his interest in the material quality of things, his championing of the apparently mundane if seen within a broader context, his doubts about representational art compared to environmental beauty, and his valuing of the sociability of human intercourse all point to a rich concept of what architecture can be, or can be considered to be. For what, after all, is architecture such that it is something good? What ontology of architecture can lend itself to Moore's question: what, above all else, is ultimately good? And I would wish to take this question in *both* the senses that his notion of the good allows: in a moral sense *and* in the sense of beauty. Both these aspects seem to me to be pertinent to an ethics of architecture.

The first and most important implication for architectural ontology is that if architecture is to be good, then it cannot be of the nature of an object but has to be of the nature of one of these organic wholes which Moore posits. More specifically, it must combine both the object – that is, we could say in the interests of terminological consistency, the building – and the appreciation of that building by those who come to contemplate it. Architecture, in other words, does not have the type of existence that an object has; architecture is something entirely different to a building. Architecture is (I am suggesting, provisionally) the complex whole made up of the building and those who come to contemplate it. This means that ontologies of architecture which take as read that architecture is a subset of buildings or objects, such as those that consider architecture defined in a formal manner, would be seen to be reducing the possibilities of both an ethics of architecture and the ontology of architecture. Architecture, considered as form, and taking into account Moore's theory of complex wholes, is an impoverished thing. Rather, the highest good could only have a chance of taking hold in architecture if it is defined as a complex whole that inherently involves the subject.

Taking this thought further with respect to the question of existence and materiality, I would argue that the complex whole of architecture, in order to aspire to the ultimate good, would need to incorporate into itself particles of these things too. The complex whole of architecture should include the brute and material existence of the object, so that this whole includes not just a contemplation of the building (which would be possible with drawn or otherwise represented projects) but also an inhabitation and material interplay with it. The particles of which the complex whole of architecture consists should include not only the subject who contemplates, the object they are contemplating, and the ideational interplay between them, but also the inhabitation or other material interplay that can occur when the building is built. If we regard architecture in this way – if this is, for us, its ontology, its way of being – then the possible good of architecture is greater than if these particles of existence, matter and interplay did not exist within the complex whole. Again, according to Moore, existence and matter considered in themselves do not necessarily have anything good about them. It is only in their co-existence within the whole that they cause or allow that whole to be better than it might otherwise be.

The fertility of Moore's thought for a rich notion of architecture seems to me to be exemplified by his championing of *two* ultimate goods – the good of the contemplation of the beautiful, and the good of the pleasures of human intercourse. These are regarded as potentially equally good. One criticism that can be made of the last chapter of *Principia Ethica* is that having made this assertion, Moore spends time dealing with the former, but very little time outlining what the implications of the pleasures of human intercourse are. In relation to the complex whole of architecture, however, some clear conclusions can be reached. Yes, architecture is the involvement or implication of various particles such as existence, matter, the building and its

contemplation with the person who comes to inhabit or otherwise engage with them; but we need to go further than this. There is an inherently *social* nature to this architectural complex whole. In other words, in Moore's terms, this complex whole must and should include within it, in order to become as good as it can be, in order to aspire to the highest good, the pleasures of human intercourse. The pleasures of human intercourse is itself a complex whole made up of more than one human being, and this complex whole is perforce of greater value than the individual existence of one human being. In turn, I am arguing that this complex whole should be and commonly is a part of a greater complex whole of architecture. In other words, that architecture includes within it, as a particle helping to make it up, the pleasures of human intercourse as well as the aforementioned other particles such as existence, matter, building, the individual, the contemplation of these things and the material interplay or inhabitation with these things. This returns us to Vitruvius, Alberti, Laugier and Semper: what distinguishes their myths of the origins of architecture is that they refer to the social, to the 'pleasures of human intercourse', to the 'concourse of mankind' (*in eo hominum congressu*) as Vitruvius puts it, around the fire or the hearth or in the act of creating the first shelter.[29] It is as if, in following an analysis of architecture which splits it into parts, architectural theory must then resort to myth and origins in order to invoke what is in fact, according to the ontology I am outlining here, always already and even now a constituent part of it.

What is the possible use of such a conception or ontology of architecture? (What difference, in the end, is there between a *conception* of architecture and an *ontology* of architecture? An ontology is what a thing *is*, the way in which it exists. For us, something exists only for us and in relation to us. Therefore, our conception of a thing determines the ontology of that thing. In other words, we have some potential control over the ontology of something like

architecture.) Seen in the light of this traditional architectural-theoretical approach, taking its lead from Aristotle and the progression from generalities to particulars and which therefore analyses complex wholes into their constituent elements, the placing together of these various particles makes little sense. We are at the end of a several thousand-year history of taking things to pieces. This analytical contemplation of things has an effect; specifically it has an *ontological* effect, since architecture has come to be defined within this analytical framework not as a complex whole, but rather as one of the more simple parts of it. This ontology in turn affects the production of architecture, since what is conceived during its production is influenced and underpinned by that ontology, whether that ontology is acknowledged or not. And the less the presuppositions implicit in an ontology are acknowledged and understood, the more powerful and influential those presuppositions are. It matters what is intended when we speak about architecture; it matters what the architect intends when she decides to design. It is a very different thing to intend a building – an object – than to intend a multiplicity, a complex whole of which buildings are a necessary but by no means sufficient part.

As we saw above, Moore's *Principia Ethica* represents, in some sense, the 'birth' of the analytical traditional in philosophy. It is therefore something of a paradox that it is precisely in this book that we find the tool to begin to undo or go beyond what analysis, since Aristotle, has achieved. This simple tool – the thought of complex wholes – together with the raising of two types of complex wholes – the contemplation of the beautiful and the pleasures of human intercourse – to the ultimate good, provide us with a clue to establish not the origins of architecture, but rather its ontology, its character, its mode of existence here and now, and always.

Moore's insights do, however, seem to me to require one point of critique and one instance of

carrying further their implications. The point of critique is in relation to his conception of the nature of these complex wholes. He regards them as being unities in the manner of organic bodies.[30] So, for instance, the ultimate good of the contemplation of something beautiful is a complex whole made up of two parts – the contemplation and the beautiful thing; and this complex whole has the character, for Moore, of an organic entity, a body. The beautiful thing fits with the contemplation of it as, for instance, an arm fits with the rest of a body. The arm and its relation to its body is the example that Moore gives to explain his organic conception of these complex wholes. Now this seems to me to be an intrinsically unlikely comparison to make. What authorises us to characterise the relation between the person contemplating a beautiful thing and that thing itself as like an arm to a body? It seems to me that Moore has not sufficiently thought through the implications of his idea of complex wholes, since the positing of an organic unity is by no means necessary to make them conceptually effective. He has relied upon that old tradition of thought leading directly back to Aristotle's characterisation of poetry as an organic whole and which, as we have seen, Alberti makes specific reference to in relation to the organic quality of architecture. Instead of this traditional organic unity, I wish to posit that these complex entities which Moore has furnished us with, and which provide a clue for a rich architectural ontology, should in no way be thought of as either organic or, indeed, whole.

Ignoring the call of the organic or the whole will then allow us to carry further, in a constructive way, an implication of Moore's nested structure of complex multiplicities. This structure enables us to see two things, or several things, as a multiplicity – a multiple individual thing. If these individuals (for instance buildings, people, the contemplation of buildings, their inhabitation) brought, or seen, together are themselves complex individuals or multiplicities (for they are assuredly not simple things in the

manner in which Moore defines them), then nothing prevents that larger multiplicity (which I have called architecture) from being, or being seen as, part of still larger multiplicities. Further, there is nothing to say that this structure only applies at a certain mid-sized scale. It may be that in our common ways of thinking we concentrate on medium-sized things, but in principle this nesting of one complex entity into another goes on to embrace everything. I would like to suggest, as the conclusion to this essay, that architecture can thereby be for us something opening out onto the cosmos as a whole, by virtue of this infinite containing of complex individuals within still broader complex multiplicities – a nesting to infinity that enables us to catch a glimpse of the cosmic ontology of architecture.

Notes

1. George Edward Moore, *Principia Ethica* (Cambridge: Cambridge University Press, 1954).

2. Bertrand Russell, *History of Western Philosophy and its Connection with Political and Social Circumstances from the Earliest Times to the Present Day* (London: George Allen & Unwin, 1961).

3. Moore, *Principia Ethica*, 2.

4. Bertrand Russell and Alfred North Whitehead, *Principia Mathematica,* Volumes 1 to 3 (Cambridge: Cambridge University Press: 1910–1913). The theory was first outlined in Russell's *The Principals of Mathematics*, published in 1903, one year before *Principia Ethica*. Bertrand Russell, *The Principals of Mathematics* (Cambridge: Cambridge University Press, 1903).

5. Bertrand Russell, *My Philosophical Development* (London: Routledge 1959), Chapter 10.

6. Willard Van Orman Quine, 'Ontological Relativity', in *Ontological Relativity and other Essays* (New York: Columbia University Press, 1969), 51.

7. Ibid., 49.

8. Ibid., 50.

9. Aristotle *Physics* I1, 184a22–27, trans. R.P. Hardie and R.K. Gaye. Collected in *The basic Works of Aristotle*, ed. Richard McKeon (New York: Random

House, 2001), 218.

10. John Onians, *Bearers of Meaning – The Classical Orders in Antiquity, the Middle Ages and the Renaissance* (Cambridge: Cambridge University Press, 1988), 176. Onians is quoting, and giving the reference to, Francesco di Giorgio Martini's Magliabecchiano manuscript in the Biblioteca Nationale in Florence. This manuscript has a translation of Vitruvius bound in with it, and Onians notes that it is di Giorgio's exposure both to this new translation and to Alberti's architectural treatise – first published in 1485 – which led to the improvements in this version of his book.

11. Moore, *Principia Ethica*, 7. He confuses things for the reader by indicating that he thinks that oranges (i.e. the fruit) are coloured yellow. This may be a joke; whilst in the history of European colour, oranges were thought to be yellow, or rather the colour yellow encompassed orange as well as what we now call yellow, orange as a colour had been distinguished from yellow already in the early 19th century.

12. Marcus Vitruvius Pollio, *On Architecture*, Book 2, Ch. 1: Vitruvius, *On Architecture*, trans. Frank Granger (Cambridge, MA: Harvard University Press, 1932), 77–79. Leon Battista Alberti, *On The Art of Building in Ten Books*, Book 1, trans. Joseph Rywert, Neil Leach and Robert Tavernor (Cambridge, MA: The MIT Press, 1988), 3.

13. Marc-Antoine Laugier, *An Essay on Architecture*, Ch. 1, trans. Wolfgang and Anni Herman (Los Angeles: Hennessey and Ingles, 1977), 11–12.

14. Gottfried Semper, *The Four Elements of Architecture – A Contribution to the Comparative Study of Architecture*, Ch. 4. Translated and collected in Gottfried Semper, *The Four Elements of Architecture and other writings*, trans. Henry Francis Mallgrave and Wolfgang Herrmann (Cambridge: Cambridge University Press, 2011), 102.

15. Aristotle, *Poetics*, trans. by Ingram Bywater, collected in McKeon, *Basic Works of Aristotle*, 1453ff.

16. Aristotle *Poetics* II8, 1451a30-35. Collected in *Basic Works of Aristotle*, 1463.

17. Alberti, *Art of Building*, 301–304.

18. This point is made by Peter Carl in the preface to *Architecture and Continuity*. Peter Carl and Delibor Vesely, *Architecture and Continuity* (London: Architectural Association, 1982), 5.

19. Moore, *Principia Ethica*, 10.

20. See for instance Carlo Rovelli, *Reality is not what it Seems – the Journey to Quantum Gravity*, trans. Simon Carnell and Erica Segre (London: Allen Lane, 2016), 228–229: 'This acute awareness of our ignorance is the heart of scientific thinking. It is thanks to this awareness of the limits of our knowledge that we have learned so much.'

21. It applies also to philosophical traditions other than analytical philosophy, such as Kantian philosophy where the limits of metaphysics are carefully drawn in order to avoid dogmatism. See the introduction to the first critique: Immanuel Kant, *Critique of Pure Reason*, trans. Norman Kemp Smith (London, Macmillan, 1933), 56–57. Again, Kant has it that this critical philosophy is therefore a science.

22. Alberti, *Art of Building*, 315.

23. Moore, *Principia Ethica*, 149. This question is something which Moore looks at in detail in chapter five of the book, from which this quotation is taken.

24. Ibid., 21.

25. Ibid., 188.

26. Ibid., 188.

27. Ibid., 189.

28. Ibid., 205–207.

29. Marcus Vitruvius Pollio, *On Architecture*, Book 2, Ch. 1, 78–79.

30. Moore, *Principia Ethica*, 31.

Biography

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