

Creative Intelligence in Architecture.

By Philip Meadowcroft and Sam Causer

The fractured nature of contemporary architecture and theoretical debate is characterised by a preoccupation with specialised disciplines from either a technical or broader cultural background, but rarely from both at the same time. This impinges directly on everyday practice, where as a result the technical issues are treated in separation from the corresponding cultural context. In a media-oriented society it is evident that there is an increasing tendency to remedy the split by intoxication with aesthetics, superficial graphic images and the cult of the individual, subjective imagination. The main source of this problematic situation is a lack of understanding of what constitutes intelligent architecture and a failure to represent the whole spectrum of issues involved. It is vital to understand that architecture is a synthetic discipline within which the various specialisations should be recognised as contributions to a common culture, which they all share.

At the core of the problem lies the dichotomy of theory and praxis, form and material, and their appropriate relation. Aristotle writes in his *Physics*, 'matter longs for form as its fulfilment, as the female longs for a male'. This analogy has since reverberated throughout western thought. One of its clearest articulations can be found in an influential text of the *Hypnerotomachia Poliphili* from the end of the fifteenth century. The author of the text uses this analogy, to elucidate the archetypal role of love (eros) in the work of an architect and in the formation of the synthetic nature of architecture.

Wandering through a garden interpreted as ignorance guided by intuition, the hero Poliphilo encounters three portals. That to the left is inscribed *Glori Dei*, and encloses a vision of life based solely on divine - theoretical - contemplation. That to the right is inscribed *Gloria Mundi*, a tempting place abounding with material worldly glory. But it is Poliphilo's wise choice to enter the central portal, inscribed *Mater Amoris*. Beyond he finds a world where the platonic Idea is fused with elementary matter. This allegory has not lost its pertinence despite the historical distance which separates us from the fifteenth century. For our purpose we may interpret it as a fusion of abstract and concrete intentions – of architectural theory with the appropriate context of everyday practical life. The allegory speaks of the same cultural dichotomy (which we know today) and the virtue of the synthesis of opposites at the core of the architectural endeavour.

The synthesis to which we refer arises out of a collaborative dialogue. It is a synthesis of fragments, brought together from the wide circle of those who influence the project. This includes everybody from the client to the craftsmen on site. The intelligence of the project is a synthesis of their own individual intelligence, knowledge and skills. The main setting within which this occurs is (remains) the design studio whether in a school or in the office. It is here that the various disciplines can be integrated in a unifying framework of discourse which moves from the more general to the more specific characteristics of the project. We have still not probably discovered the full creative

possibilities (potential) of the studio. What makes these possibilities unique is the long tradition of effort to visualise even the most abstract ideas and to situate them in the corporeal and spatial conditions of our existence. In many ways the design studio is to architecture what the laboratory is to science. It is the place where theory and practice commune and where, as a result, the realm of possibilities arises from the accumulated knowledge and shared experience. The successful outcome of a project depends on the openness to dialogue, which protects it against narrow professionalism and self-referential context.

Architecture engages with a broad range of people from the client to planners, craftsmen, consultants (engineers, quantity surveyors, acoustic specialists, etc) all of whom bring in not only their specialised knowledge but also their own cultural background.

For the successful results of the design process, it is critical to discover the level of experience which can be shared by all those who participate in the process. Such level of experience can be found on the level of pre-reflective experience and common culture which underlies each design process, indeed underlies all our actions, collective and individual. It is this experience which allows communication itself to take place. Within the context of design it is the basis of typical programs and scenarios which we understand as paradigmatic situations.

In our current project of a house, the paradigmatic situation of a house enables us to understand its primary nature on a common intuitive level and in its given concreteness. This understanding differs from the commonly used term typology which deals with a categorisation of physical form. Our understanding of a typical, or paradigmatic situation is concerned with the typicality of interrelated events or scenarios, common, but at the same time unique for each specific case. The tension between the typicality of situation and the specificity of each project is precisely what animates design from the outset.

In the case of the house there is an immediate understanding of the range of situations and events which are involved as given - eating, sleeping, entertaining, study, work, conversation. These are given as cultural norms - the way we live in a domestic environment. Site, topography, context are other givens which also affect the articulation of the project.

The point at which the universal engages the specific occurs most directly through the influence of the client. In our case the client is rare book dealer. Apart from the specific requirements such as the numbers of bedrooms, gallery, studio, number of bathrooms, etc., the most important is how the client's world is brought to bear on the design. This decides how decisions are made concerning the interaction of spaces and their qualities in terms of material, ambience, character and identity. Through research, dialogue, and an empathetic relationship with the client a new layer of meaning is introduced into the process. Through sequences of mapping, sketching, presentation and discussion the process acquires the character of reflective understanding. The world of the client is

assimilated in the project through a mode of resonance which infuses and orients all subsequent conversations with other parties even of the most pragmatic kind. How the world of the client is reflected in the visible structure of the house is apparent already in the casting of basement concrete retaining walls. The surface of the walls, fragile as parchment, is analogous to the drying of paper, while at the same time it is as firm as a foot standing on a solid ground. The superstructure of steel frame construction has introduced a material language of thin internal and external claddings, which are akin to the thinness and translucency of leaves of a book. Veneered internal panelling seems appropriate in the same way. We have found that discussion of these things with the client are immediately understandable and somehow familiar - they are 'of his world'.

So far we have discussed the process of design in relation to its content. However it is important to mention, that the broader and deeper understanding of the content can be preserved and enhanced, but also lost in the media, used in the interpretation of the content. In a world where computers are the norm, we consider that the reciprocity with other media is pertinent as a complement to the undoubted, but rather limited attributes of the computer programs. The computer can replicate all modes of representation and can inspire the imagination in different and potentially useful ways. However, the virtue of the sketch, drawing or physical model lies, in their ability to represent the actual reality of space as it is structured in the sphere of the embodied human existence. Each medium, including computer, has a different ability to represent the reality of space. However there is a fundamental difference between the media directly involved in the actual reality of space and those involved only indirectly.

To perceive, to move and to visualise directly in the human world is possible only owing to a corporeal involvement. The disembodied nature of computer programs is the main reason for their inability to match the same level of concreteness and human intelligence. Computers can be exceptionally useful, but only if we remember, that their indirect link with reality depends on the dialog with other media.

The relation between the extended understanding of the content of a particular project and its corresponding representation is critical. It can lead to an enhancement of creative intelligence, but also to its loss. How critical this relation is, we can see very well in a situation where the project is designed entirely on a computer and where it is not clear to what extent the design is determined by its content or rather by the most convenient means of representation. This is a familiar dilemma which we face in front of a computer and don't have any other reference. The question of creative intelligence can be seen in the end as a question of reference. Reference of representation to the content of the project, and of the content to the broad context of culture as its ultimate source. It is the richness and continuity of reference to its own source that decides, more than anything else, the level of creative intelligence. This returns us to the main part of our argument in which we have attempted to show, that architectural knowledge and intelligence don't originate in theory but in the depth of our culture and that before it becomes verbal it is already visual.