

**Edge, Surface & Lining:
In Praise of Ornament as Tectonic Device**

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Abstract

For more than twenty years, the question of how to intervene in sensitive historic settings has been the preoccupation of the Continuity in Architecture Unit at Manchester School of Architecture. Projects in multiple European urban settings as diverse as Venice, Manchester, Cartmel, Dubrovnik, Preston and Antwerp have yielded productive, stimulating approaches to the task of maintaining cultural, material, social and spiritual continuity. But there is a constant need to reinvigorate the approach.

It is in facing the realities of climate change that the work has taken on a new urgency, since the technical demands on historic structures are ever increasing, particularly in the light of an inexorably slow process of replacing our ageing building stock.

Scarpa's articulated tectonic lamination - a deliberative approach to the architectural detail (exemplified by the Castellvecchio Museum in Verona) offers one half of the proposition. The other half is provided by Bloomer's survey of the meaning and intention of ornament ('The Nature of Ornament', 2000), and in particular, through the concept of metamorphosis and the role it plays in highlighting edges and interstices to elevate beauty to utility. The thread common to both is the resurgence of craft as an intelligent and intelligible activity.

With a predilection for extending the idea of continuity (cf Machado's 'Old Buildings as Palimpsest' (1976)) a process of refurbishment and technical upgrading that has architectural integrity comes into view.

In other words, the means to achieving an appropriate ‘bauphysik’ solution in historic fabric that is rigorous, expressive and clear is made possible by the co-opting of decorative, architectonic and philosophical means. This is wholly consistent with the pedagogic agenda of Continuity in Architecture, as well as the demands of contemporary architectural praxis in a heritage setting.

Work from practice and teaching is used to illustrate this measured approach.

Introduction

The emergence of an unembarrassed embrace of decoration and ornament in architecture has been one of the most engaging outcomes of the listless diversity of architecture ‘post’ the post moderns.

The implications for those working in the field of heritage has been perhaps the most compelling thread which my work with the Continuity in Architecture Atelier at the Manchester School of Architecture has followed. The group have begun to pull on that thread, without being certain of where it will lead.

It is already yielding pedagogic results - in the form of students and tutors engaged in pushing back against the received wisdom of the Venice Charter strategies for working in a historic setting. Critical reflections on the recent work of the Atelier forced us to conclude that the work had developed into a limited, bounded approach to place and context - whether working

close to home in Preston, Cartmel and Manchester, or further afield in Dubrovnik, Milan, and most notably, Venice.

Peter Zumthor at Kolumba challenged the Venice Charter ‘commandments’ by collapsing new and old into a merged architectonic element - the mediaeval wall surface seamlessly extended into the new. Witherford Watson Mann - unexpected but worthy winners of last year’s RIBA Stirling Prize - took a similar approach, albeit with a warmer, more domestic palette of materials.

At the same time, the work of the UK’s Caruso St John has taken an exhilarating turn into full-blown ornament. Influences from Soane to Van der Velde to Jacobsen are apparent in the earnest detailing of Tate Britain, notably in the spectacular spiral staircase. Their work here, and at the Soane Museum has confounded critics who seem to struggle to categorise and assimilate the notion that ornament might have a place in modern architecture. Those same critics have found it rather easier to assimilate those architects working on variants of the ‘decorated box’, found for example in the work of the new Dutch School of Wiel Arets and Neutelings Riedijk, and preeminently in Herzog and de Meuron’s cladding solutions.

Underneath this aesthetic clamour there remains a pressing need to redress the imbalance in the planet’s ecology, and it is hard to avoid the conclusion that the gargantuan problem of upgrading existing deficiencies in building stock is beneath consideration for architectural discourse.

This paper attempts to introduce a strategy for the reintegration of ornament into the architectural discourse. It tries to do this through classification of terms - principally by distinguishing *decoration* from *ornament* - but also through carefully selected case studies. The outcome, already evident in the work of the Continuity in Architecture Atelier students - is an assertive, direct engagement with the issue of building technology in a heritage setting. This is perceptible in the tectonic assemblies which comprise the edges, surfaces and linings of architectural forms.

I want to begin the core of this lecture by proposing we should distinguish between 'decoration' and 'ornament'.

Kent C Bloomer suggests a distinction be made on the basis of *disposition*.

'The closest synonym employed in modern speech for the term 'ornament' is 'embellishment', which means something that has come into the body of a practical object from without. The term decoration on the other hand, implies a pleasing arrangement of things and the suggestion of the decorous, a condition marked by propriety, good taste, good conduct, and good appearance.' □¹

We might deploy this to assert, perhaps provisionally, that decoration is skin deep - a surface manifestation of artistic expression - whereas ornament as Bloomer hints, is integrated in a manner inseparable from tectonic expression. Because of this, it maintains an intimate relationship with 'building physics', the practical craft of construction.

Implicit in this, then, is the idea that ornament contains within it a core value of utility. Drawing on the definitions of Alberti and Vitruvius he declares that ornament is a combination of beauty and utility. Thus we arrive at a proposition that ornament is that part of an architectonic element which elaborates, amplifies and embellishes the function of that component.

The idea of the integration of ornament with form has a strong pedigree. Penny cites Ruskin's vilification of the decoration of Scuola San Rocco for the same reason:

‘All these ornaments are true to nature, but not true to Ruskin's principle of natural growth:

“...they have all the marked faults of being utterly detached from the architecture. The wreaths round the columns look as if they would drop off the next moment, and the animals at the bases produce exactly the effect of mice who had got there by accident: one feels them ridiculously diminutive and utterly useless.’”²

Bloomer makes a further distinction which is we might regard as helpful.

He observes that ornament is associated with those architectonic elements that are *transitional*. To build on this, what we might infer is that it attends to the parts of the building which lie at the junction of dissimilar zones. Proper attention has in the past been given to ornamental treatments of window heads, architraves, parapets, pedestals, porches, spandrels, and so on. They are found, in other words, everywhere but the general wall plane, which we may assert remains the realm of decoration.

Some examples are needed at this point. And given the wide experience of our Continuity in Architecture Atelier at Manchester School of Architecture in Venice, that city ought to supply them.

The main example of the transitional element I'll talk briefly about is the wall opening [Image of Palazzo on Grand Canal]. There at the base is the roman (semi-circular) arch - the classic solution - here deployed as the 'watergate' entry to the androne at the heart of this distinctive Venetian type. But the Venetian window [image] seems to respond to wall load in a more lyrical way. The opening appears in the wall like two curtains being pulled apart, such that the load smoothly passes around the void. The form offers beautiful decorative potential for each of the parts in the frame and head.

At the Fish Market, [image] a simple semicircular arch is provided with the minimum of mouldings to direct rainwater around the arch and down the column. This is apparent in the stained run-off from the iron wall ties.

The church of San Trovaso may be regarded as typical in classical terms, in the way the ornamental components describe the edges and joins of larger architectural elements - wall, eaves, gable, and so on.

And the opening in the brick screen for the doorway into the Church of San Polo is ornamentally theatrical in a number of ways. Firstly, [image] the venetian arch is allowed to break through the parapet line to take part in the transition of building to sky. Secondly, the

[image] architrave is elaborated to an extraordinary degree. Far from merely ‘hemming’ the ends of the walls, and covering the construction joints, it cascades into the opening in a boldly articulated array of dentils, vine leaves, borders, spirals and ropes.

Yet it is not unique. Here [image] is the one at Frari - complete with the work of a joiner eager to show he could do in wood what his friends could do in stone.

The spiky, aggressive [image] ‘bugnato’ in Vicenza might at first be perceived as decorative (i.e. confined to the surface of the wall), but the treatment is more properly ornamental, for the reason that it is *integral* to the wall construction, three-dimensional, and an expressive, decisive embellishment of the wall’s character of supporting and protecting.

Junctions

Now because we are speaking of junctions and transitions, it ought to be apparent that we are also talking (in modern parlance) about details. We are speaking about those joins in a building where construction components collaborate to agree a connection that keeps wind and rain at bay.

In ‘The Architectural Detail’, Edward Ford³ proposes a taxonomy of details. He lists five definitions:

There are no details in modernism (detail as abstraction)

A detail is a fragment in which the whole building is represented (detail as motif)

Details are the articulation of structure (detail as an order)

Details are the articulation of construction (detail as joint)

The detail as autonomous design (detail as subversive activity)

All are worthy of discussion, but the fourth of these (detail as joint) is the one which we will focus on. All details, I would argue, have ornamental potential.

In fact, Louis Kahn said so:

‘The joint is the beginning of ornament...I recognised that the capital had to hold its volutes out to invite the span. It had to reach out, receive it, and the reaching out had to be bigger than what the column was.’⁴

Now one of the favourite architects of the Continuity in Architecture Atelier looms large at this point: Carlo Scarpa. There is no question that Scarpa’s details fall into the category of ornament, in my view. They are certainly three-dimensional, and are not mere decorated surfaces. They also amplify and embellish the functional purpose of the components. Think of [image] the roof of the Castellvecchio, for example. The fact that it is deceptive (there is no copper under all the other pantiles) is hardly relevant - it lyrically embellishes the truth, so that it is more convincingly true than the reality. It is insistent detailing, celebrating fabrication and the act of construction.

Craft, then, ought to have a place in this schema. Indeed, Bloomer also helpfully introduces us to the consideration of ornament as metamorphosis. He writes:

'The identity of the term ornament, therefore, has always depended on the incorporation of other considerations into the fabric of practical objects – considerations that might fulfil a picture of the world in which the object is performing. That accomplishment is essentially combinational, which is to say that all art functions as a visual system or type of configuration capable of apprehending and uniting multiple meanings. Such an act of combining may not have to be as culturally specific as it must be visually intelligible.

The principal strategy required to achieve an image of combination in ornament is to present a spectacle of transformation. In that spectacle, it may appear that one thing is turning into another and vice versa. When Henri Focillon, in 'The Life Forms in Art', exquisitely identifies ornament as "the chosen home of Metamorphoses", he makes ornament into a habitat that allows metamorphosis.¹⁵

It is craft that speaks of intent, and intent that invites curiosity, and curiosity that wrestles with meaning. The spectacle of transformation of the construction material is therefore a fundamental part of effective ornamentation.

Intent

So we are here obliged to consider the issue of the intent/meaning of ornament. We can only do so briefly.

For Scarpa, the beauty of utility (ornament) is displayed in the revelation of craft and assembly - not in the individual elements speaking of their action as, say, load bearing elements. Indeed, Ford levels a common accusation at Scarpa: that he is not actually concerned about the

whole in any real sense. For that reason, he argues, there is always a question hanging over Scarpa's work, which is 'is it finished?'. When it comes to meaning, therefore, there is arguably no sense of a grand plan, i.e. that of the disparate details working together to provide, say, narrative coherence.

What about Caruso St John's interventions at Tate Britain?

When we look at the extraordinary spiral staircase [image], can we call it ornamental? Or are the patterns merely decorative?

There is utility in the fact that the balustrade prevents falling, and supports the stair. Its handrail follows the sweep to provide support for the users. And it is perforated (or lower down, translucent). Perhaps it is the perforations where the utility is questionable? What are the holes for? Since they are the principal expressive device, ought we to know that they are functionally essential to the composition? Perhaps we can admit that it is helpful to let light into the basement hallway, and leave it at that.

More specific doubts about utility and artistic appropriateness are raised when we find ~ the fish-scale motif is reapplied, enlarged to become the sleek scaly skin of Basel Aquarium, appearing in ~ the interior too.

Consider Sullivan again, here at the Farmers and Merchants Union Bank quoted by Venturi in 'Complexity and Contradiction in Architecture'. He uses it as an example because of the economical way in which Sullivan negotiates the transition from bi- to trilateral to unilateral

symmetry. This is achieved through the introduction of the frieze over the doors, which steps from two (below) to three (the sign/frieze) clearing the way for the arched window in the centre of the plainest of brick planes. Above all, Venturi commends the facade for its overall unity, achieved by its hem - an ornamental band of stone at the parapet, which quietly declares the subordination of those effusive parts to the whole. Meaning and intent are thereby effectively disciplined - literally framed.

Synthesis

With what we can of this 'field' research – a field that is actually perhaps more an 'ornamental garden' glimpsed over the garden wall, and through the gate - these are necessarily tentative steps. However, I think we can draw some themes together which can inform an approach which opens up the possibility of introducing ornament into our work - and to do that in a way which has integrity and rigour. There are three, followed by three more.

Location

Ornamental expression has its proper place in the transitional elements of the construction, whether

In *lines* - the joining of perpendiculars;

In *surface* - the joining of planes;

In *elements* - the joining of imperforate wall to opening;

In *essence* - the joining of solid to air (especially, in the silhouette/skyline).

Utility

Ornament is an outward expression of an inner truth about the component in question. It is embellishment - not encrustation, but literally a 'making-beautiful' of what is there out of necessity. So we are required to ask what is necessary in our buildings - drips, parapets, parts that resist wear and tear, insulate, seal, provide security, shelter from the sun, provide heat - and seize the opportunity to give them a poetic vitality.

Transformation

Ornament is realised in the transformation of material from one state - or one form - into another. In other words, the material is 'worked' from a raw state into something elevated, separated, distinct and specific for its purpose. Thus, we should think of the processes which will change the material so that it conveys the truth of its utility through the way it is crafted.

Location. Utility. Transformation

To that we might add three more parameters which are also necessary to underpin and inform the process.

Place

The ornamental treatment ought to spring from a reading of the place. It is inescapable (for example) that water, the sea, fishing, tides, boats, mist, salt, ropes - and more - are together the essence of the Venice. Ornament past and present can be informed by this.

Culture

Ornament will be informed by the cultural context of its setting. Apart from the physical properties of the place, there are those moves which carry meaning - of which religious symbolism dominates, of course, in Venetian ornament. But there are secular motifs and devices too.

Personality

The designer and craftsperson will naturally appear in the ornament., since it is about artistic expression of a sort. This is an endeavour that is in the end subjective - an endeavour to create engaging works of architecture. The designer and craftsperson need to be seen in it, together with that designer's home culture, and worldview.

Pimlott usefully draws a number of these threads together for us:

'The impulse to ornament or decoration turns on the need for both visual and sensual pleasure, and for fantasy. If such indulgences have always been found in objects, interiors, buildings and cities, why should they not exist now? The making of architecture is, after all, the making of a fiction, a speculation about how a building might express its difference from the unconscious world. A consideration of any monuments of antiquity will show that the elements of construction are representations – they are ideas about what buildings do and say. ~ Representation and ideas are part of architecture's nature, and fantasy and the impulse to ornamentation are joined to its fundamental ideas.'⁶

They echo the words of Owen Jones expressed with recognisably Victorian authority come from 'The Grammar of Ornament':

Ornament 'should possess fitness, proportions, harmony, the result of which is repose ... that repose which the mind feels when the eye, the intellect, and affectations are satisfied.'⁷

Close

The essence of an architectural intervention in an existing building is the supplementing of what already *is* with something that is *new*. That new element is predicated on the nature of edge, surface, and lining. In other words, the introduction of the new of necessity generates junctions that are distinct from the condition of the original. As I've argued here, it is in the transitions between architectural elements that the proper realm of ornament lies. Indeed ornament remains a vital, if neglected means of dealing with junctions in a lyrical manner. In working with existing buildings, the sensitive, contextual treatment of those junctions can be extended beyond the reductive reasoning of the 'shadow gap' and the lazy contrast of the plain (=modern) with the ornamented (=old). To extend beyond this limited response holds the promise of exploring a new vocabulary and new modes of expression for the meeting of old and new. Furthermore, the creation of replacement heritage components need not fall back into either replica and pastiche, or studied decay. Developing a rigorous mode of expression - a new tool for the architect to tackle sensitive heritage assets - opens up new possibilities for how we might intervene in urban environments.

Finally, celebrating the junction through ornamental means allows us to incorporate the awkward reality of our responsibilities to mitigate the effects of an overheating planet - and to do that in the most intractable locations: those buildings which are at one and the same time the

most valued yet technically the poorest performing. In reviving the definition of ornament as being utility embellished, we can imagine a distinctive, creative, and sensitively contextual way ahead as we re-line, re-seal and thus revive our heritage.

[3458 words including footnotes]

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Footnotes

¹ Bloomer, K ‘The Nature of Ornament: Rhythm and Metamorphosis in Architecture’ (WW Norton, 2000) p35

² Penny, N ‘Ruskin’s Ideas on Growth in Architecture and Ornament’ (British Journal of Aesthetics, 2011 p1-11)

³ Ford, E ‘The Architectural Detail’ (Princeton Architectural Press, 2011)

⁴ Quoted in Ford, E ‘The Architectural Detail’ (Princeton Architectural Press, 2011)

⁵ Bloomer, K ‘The Nature of Ornament: Rhythm and Metamorphosis in Architecture’ (WW Norton, 2000) p27

⁶ Pimlott, M. (2004). Ornament and Picture-Making . Ornament. Decorative Traditions in Architecture, OASE, (65), 6–25. Retrieved from <http://www.oasejournal.nl/en/Issues/65/OrnamentAndPicture-Making>

⁷ Jones, O ‘The Grammar of Ornament’ (Day & Son, 1856, 1st Ed)