

The spatial construction of seeing at Castelveccchio

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Abstract

An analysis of Carlo Scarpa's design of the building and the exhibition at the Castelveccchio art museum provides a foundation for a study of museum space as a symbolic form.

Introduction

In this paper we look at the manner in which Carlo Scarpa's design of the Castelveccchio art museum at Verona (1958-1974) constructs spatial meaning and functions as a complex symbolic form. We will argue that the design does not primarily communicate a historic or other narrative about art, even though narrative dimensions are present. Rather, the design functions as a pedagogic device aimed at art as a particular mode of understanding problems, including problems of visual perception and spatial arrangement. In other words, visitors are introduced not to a story about art, but to the ways of seeing that are constitutive of it. The symbolic function of the museum bears on three aspects of spatial arrangement: building layout, the positioning of displays within the layout, and the structure of occupiable space which results from the manner in which visual displays project themselves to the gaze. The relationship between these interlacing aspects of spatial arrangement and symbolic meaning is mediated by an intensively embodied experience of space, whereby the gaze acquires almost haptic dimensions through movement, and where movement becomes punctuated not merely through its interaction with physical boundaries or objects, but rather by virtue of complex visual percepts staged through design.

Our study builds upon familiar scholarship. By structuring the visual field, as it unfolds through movement, and the patterns of accessibility, connection, separation, sequencing and grouping that characterize the arrangements of displays, exhibition layouts affect the manner in which displays are perceived, compared, and cognitively

Keywords

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mapped. If we define pedagogy as the principles which govern the strength of boundaries and the modes of relationships maintained between categories of knowledge, as well as the sequencing, pacing and framing of the presentation of knowledge (Bernstein, 1975), then we can think of museum layouts as non-discursive pedagogical devices which complement the overt pedagogical aims of interpretative labels, exhibition catalogues and other related documents (Hooper-Greenhill, 1992; Staniszewski, 1998). A number of previous syntactic studies have looked at the spatial configuration and presentation of various kinds of knowledge as a generic social, cultural and pedagogical function of exhibition environments (Peponis and Hedin, 1982; Markus, 1993; Choi, 1999). From a methodological point of view, the present study complements such previous work in two ways: First, by providing a more developed description of available spatial experience as a mediator between layout and spatial meaning. Second, by providing a more explicit distinction between those aspects of spatial structure that derive from the presence of obstacles to movement or visibility, and those that result from subtler relations of orientation, visual projection and perceptual difference. In this respect, the paper builds upon the distinction between positional and compositional models offered by Peponis, Dalton, Wineman and Dalton (2003) in another contribution to this symposium. The arguments presented here, however, while based on a careful analysis of a building and the exhibitions set in it, are not tested against systematic data regarding the behavioral or cognitive responses of museum visitors. The present paper must be read as an introductory study of complex spatial affordances provided by design.

The sculpture galleries

The museum of Castelvechio occupies an old castle originally built in the 14th century and substantially extended in the 18th century. The original conversion into a museum was designed by Avena in 1926. The conversion by Scarpa was designed and implemented between 1958 and 1974. The buildings sits on a site by the Adige river at the edge of the old city of Verona. The accommodation is split in two separate major wings, connected under a bridge. The newest wing, added in the 18th century defines one edge of a major courtyard that functions as the centre of the premises. The oldest wing, the Reggia, on the other side of the bridge, was formerly a residential building (Figure 1). Scarpa has been responsible for both the renovation of the premises and for the design of the exhibition, including the precise setup and spatial arrangement of the displays. This paper discusses two galleries situated in the 18th century wing.

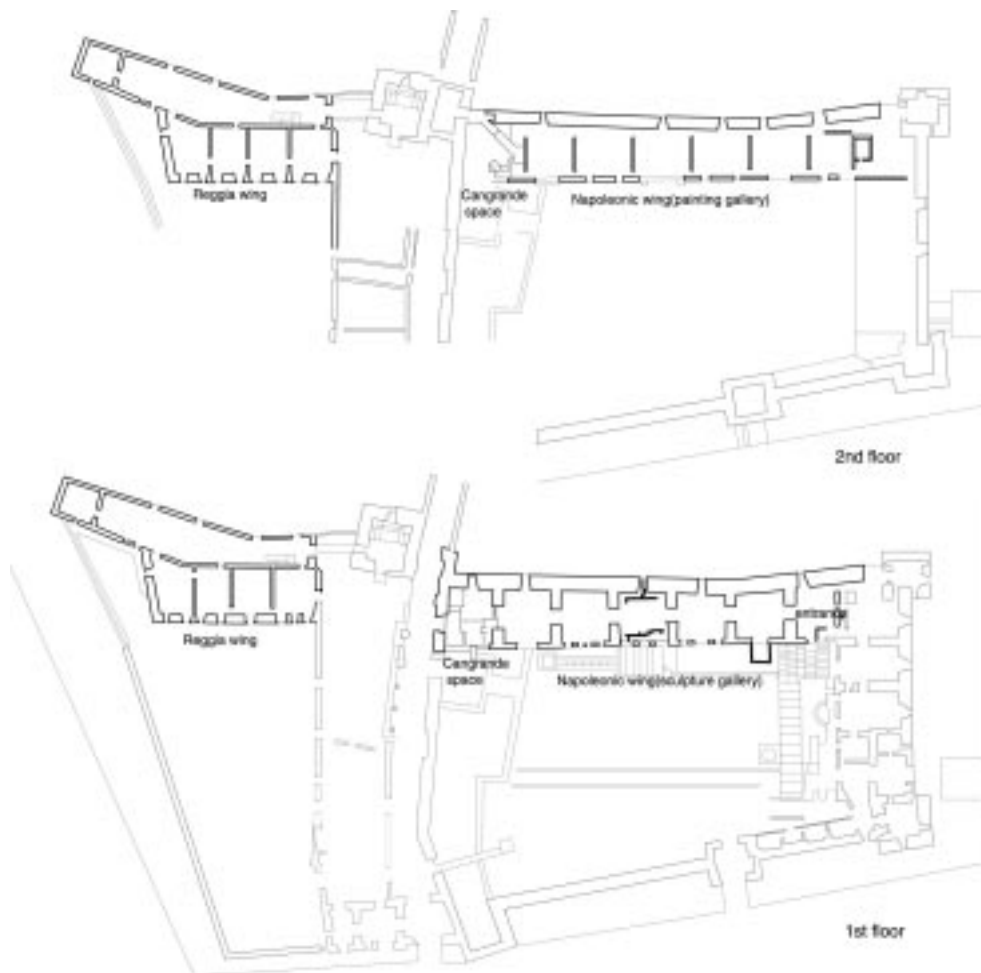
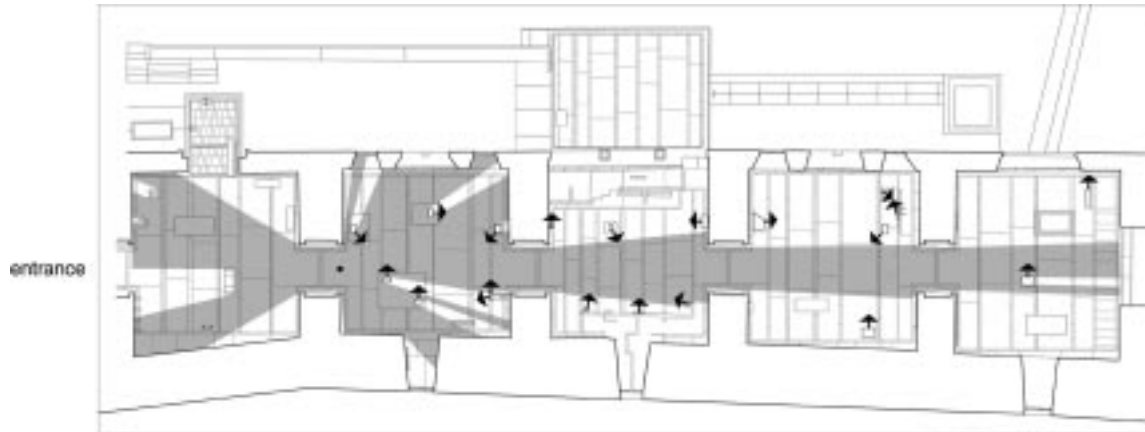


Figure 1: Overall plan of Castelvecchio

The sculpture gallery comprises five rooms and is the first to be entered by visitors. The rooms are devoted to sculptures from the early Christian and Romanesque periods through to the 14th and 15th centuries, which originally stood in the basilicas of Verona. The rooms are of a similar size, skewed square shape and axially connected into a single linear sequence. Sculptures, mostly statues, are free standing in an apparently free arrangement which, seen in diagrammatic plan, suggests no particular viewing sequence or pattern of exploration. When the orientation and precise positioning of statues is taken into account, however, a number of principles emerge which are well illustrated in the second room. At the threshold into the room, visitors have an overview of all the sculptures but do not see any of them frontally (Figure 2). By implication, they are encouraged to change direction and walk around in order to face the front of statues. As they do so, they cross the direction of each statue's gaze, which is often oblique with respect to the frontal orientation of the statue's body as a whole. In some instances, the gaze of one statue is directly oriented towards other statues (Figure 3), as if pointing visitors towards them; in other instances, the gazes of two or more statues intersect at the same point, which is not otherwise occupied or marked (Figure 4). Thus, a configurational pattern is created whereby the positioning of each statue takes into account that of others. To create

this configuration Scarpa appropriately arranges statues not only in plan but also in section, that is at different heights (not shown here). There is, however, an important difference from the point of view of a visitor.



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Figure 2: Isovist from the entrance into second room of the sculpture gallery. Arrows attached to statues represent their orientation

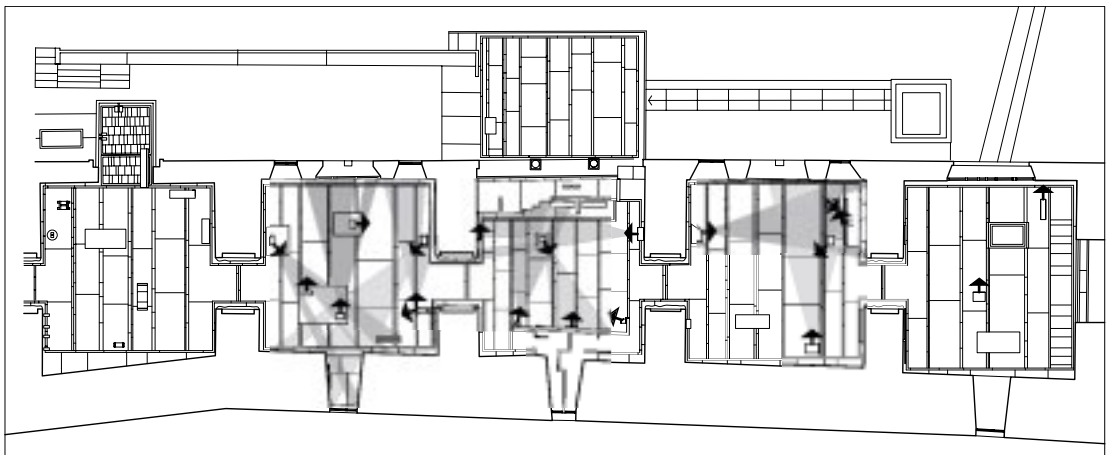


Figure 3: Statues facing other statues in the sculpture galleries

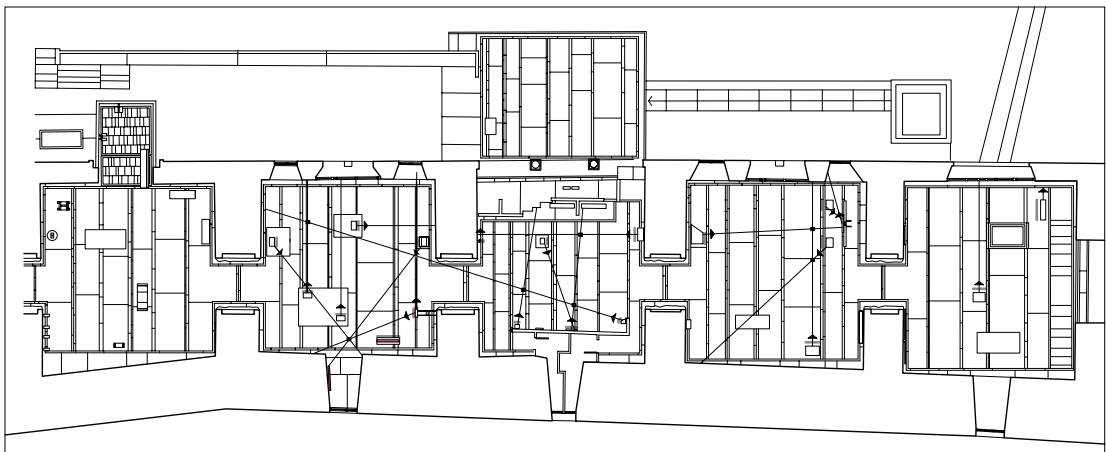


Figure 4: Intersections between the gazes of statues in the sculpture galleries

Where one statue merely looks towards another, visitors are drawn to recognize that statues have been so positioned that their relationship is retrospectively made to appear not incidental to their constitution but virtually “acknowledged” in their posture and orientation. In short, the gaze is the device that makes positioning appear deliberate. The visitors’ own positions, however, are not directly involved in these relations of entailment between the positioning and the orientation of statues. Where the gazes of more than two statues intersect at the same point, the manner in which statues virtually acknowledge each other is entirely dependent upon the visitor occupying the point of intersection and noticing the convergence of the gazes. Thus, in the second case, the embodied experience of the visitor is the device that mediates the virtual acknowledgement of the statues’ spatial relationships. The gaze of the visitor and the gaze of the statues become part of a single spatial configuration of shifting reciprocity. By implication, the body of the visitors and the bodies of statues partake in the same network of reflexive composition, the same space punctuated by directed or intersecting gazes. In constructing such a spatial field, Scarpa capitalizes on some features associated with the history of statues. Many statues were placed in high positions as part of sculptural narratives appended to the body of church buildings. Not only were their bodies oversized, but their heads, and especially their eyes were magnified so as to have greater impact. Scarpa re-contextualizes the statues within a new architectural setting, and according to the new logic which plays upon immersion rather than distant viewing, while taking advantage of qualities which arose according to different original intentions. (Figure 5)



Figure 5: Views of spatial relationships between statues

The successive nodes of the pattern of gazes can only be discovered through movement. Each statue is made to appear part of successive networks of directed or intersected gazes (Figures 3 and 4). Movement, therefore, literally becomes an exploration of shifting relationships, rather than merely an exploration of a pattern seen from changing points of view. The distinction between shifting relationships and changing points of view bears of the distinction between dense and discrete perceptual thresholds. Movement always involves continuous changes of perspective; it also always involves discontinuous thresholds where individual discontinuities (such as objects, edges or corners) come in or out of the field of vision (Peponis et

al, 1997). In the case of this museum, statues are so positioned that their gaze is fore-grounded as a discrete spatial element and discrete perceptual thresholds include the coming of visitors in or out of the projection zones defined by gazes. Thus, movement through the exhibition space becomes a process of discovering the structure of a field of gazes. As a result, the exploration of the sculpture galleries does not provide only a view of displays but also a reflexive experience of space as a field of co-presence. In turn, this leads visitors to apprehend statues as more than objects to be viewed. This is not incidental to the religious nature and symbolic functions of the statues: arrangements of sculptures in religious buildings work quite importantly as materialisations of abstract ideas into such fields of co-presence.

Against this background, space becomes invested with the expression of feelings. Thus, the figure of the Virgin fainting looks even more tragic seen across Jesus on the cross; the intense expression of pain on the face of the latter is softened by the tender gaze of Saint Anastasia, while the fragile image of his tortured body is balanced by the more stable posture of St Bartholomew who looks upon the crucifixion (figure 6). As gazes become animated by expressions, the visitor is virtually a participant in a theatrical scene, such as would have been popular in Italy during the 14th and 15th centuries (Baxandall, 1985).

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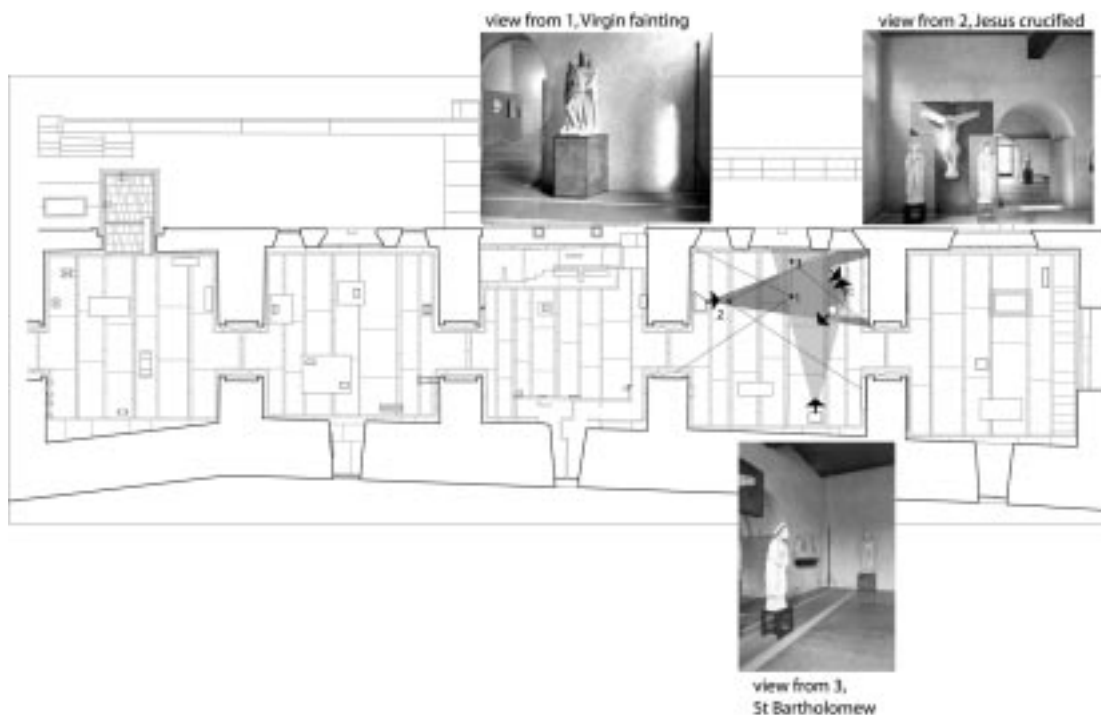


Figure 6: Spatial and expressive relationships between statues in the fourth room of the sculpture galleries

How do the potential patterns of exploration and viewing interact with the spatial structure of the layout analysed independently of the objects? We used Omnivista, software written by Nick Dalton, to flood-fill all navigable space within each of the exhibition sites with a grid of vantage points, and to generate projection polygons from these locations. Various properties are then computed for each projection polygon, including area; compactness; maximum radial length, drift and mean depth. Naturally, the results of the analysis pick up the strong axuality of the layout, with integration, maximal radial length, low compactness and low drift values associated with the central axis of movement, whether projection polygons were calculated at foot level, to describe connectivity, or at eye level, to describe visibility. Given this rather elementary, but typologically fundamental spatial structure, the following observations can be made.

Regarding orientation we have data for 19 statues. Twelve statues face towards the strongly integrated main axis, three face parallel, and four away from it. Statues face other statues on 9 occasions, in seven of which the gaze crosses the integrating axis before reaching its destination. However, the gaze of statues intersects in space on 7 occasions, only three of which occupy integrated positions. Thus, statues are so positioned that the network of gazes intersects the integration axis, as if to draw visitors away from the axes towards other points of interest. Once visitors start exploring the network of gazes, they are also drawn towards some key positions in which the integration with respect to gazes becomes far more powerful than the spatial integration with respect to layout. For economy, we offer an example of the overlay of Omnivista results upon the diagrammatic analysis of gazes: Figure 7 shows visual mean depth as the background to the superimposed diagrams of directed and intersecting gazes (Figures 3 and 4).

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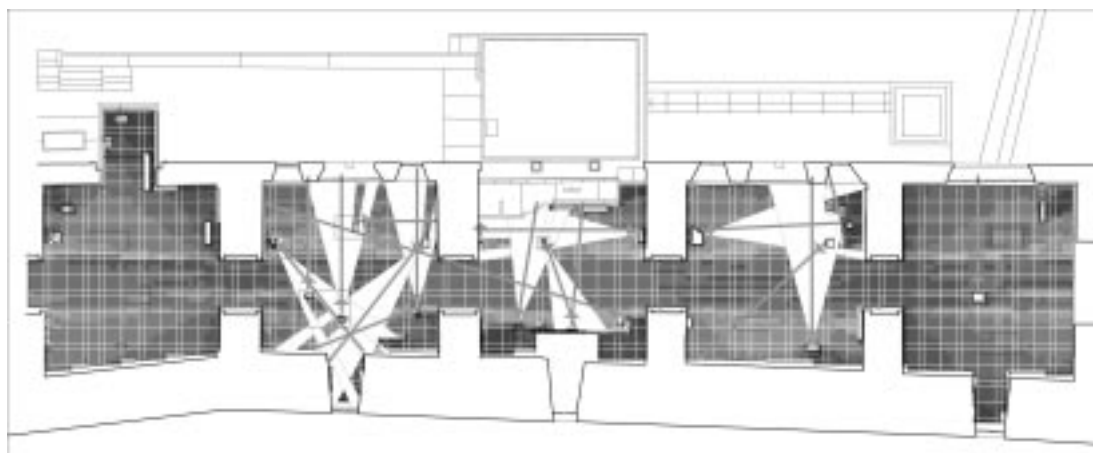


Figure 7: Pattern of gazes superimposed upon a grayscale rendition of the projection-polygon mean-depth analysis of the sculpture galleries at eye level (using Omnivista developed by Dalton and Conroy – Dalton)

The painting galleries

The last leg of the visitors' journey comprises the painting galleries located over the sculpture galleries. They are normally traversed in the opposite direction, as visitors return towards the entrance. In the interests of brevity we will discuss these galleries and omit the analysis of another set of painting galleries located in the Reggia, originally a residential section of the castle. The painting galleries are linked by two axes of movement, running along the edges of the building. These were deliberately created by Scarpa. He replaced the original transverse walls, whose openings were aligned along a central axis. The two axes are associated with very different perspectives, as shown in Figure 8. The one by the courtyard provides a one point perspective through successive doors, cut on the transverse walls. The floor finish of the main galleries extends laterally to cover the axis of movement corresponding to the one point perspective. On the other side of the plan, the axis by the river creates an elongated perspective between the edges of the transverse walls and the outer wall. This arises from the fact that the outer wall sustains an inward concave angle, about two thirds down its length. The floor finish along this axis is differentiated with respect to the gallery floor: thus, the elongated perspective is made more visible by the converging relationship between the two edges of the path, on the floor.



Figure 8: Views down the corridors along the lateral edges of the painting galleries at Castelveccio

The manner in which Scarpa emphasises these two different kinds of perspective, thereby creating ambiguities of visual depth and scale, is not coincidental. By alerting the visitor to the way in which perspectival effects can modify our perception of visual depth, Scarpa introduces visitors to questions of representation that are inherently involved with post Renaissance painting.

Scarpa creates an interplay between the visual depth suggested by the paintings and the literal visual depth created by the architectural setting. One way he does this is by having some paintings displayed on free-standing easels. This is quite systematically done in the rooms of the Reggia building, but it is also done in the second room one visits upon entering the painting galleries under discussion. The placement of some paintings on easels facing towards the periphery, creates superimpositions between them and other paintings on the opposite wall, in a manner which induces visitors to become aware of differences in scale or the painterly construction of visual depth. The placement on easels satisfies additional criteria. First, it suggests potential pairings between pairs of paintings facing each other. For example, a painting showing a woman drinking poison is placed across from a painting of Jesus being taken down from the cross, thus suggesting a contrast of feelings. Second, visitors are confronted with the back of paintings, and required to move around, in a pattern resembling the sculpture galleries. Third, the free-standing paintings become themselves metaphorically animated, as they occupy positions that would normally be available to visitors. Fourth, the centre of the room gets to be perceived as a backstage (one looks, at least in parts, from behind the backs of easels), to a peripheral front stage. Fifth, assuming a visitor moves peripherally around the room, the presence of the easels induces a change of orientation which allows a glimpse at the paintings on the opposite far wall, thus either prefiguring forthcoming or recalling previous perceptions of art. Figure 9 shows three views towards the easels, each affording complete or partial views of paintings on the opposite walls.

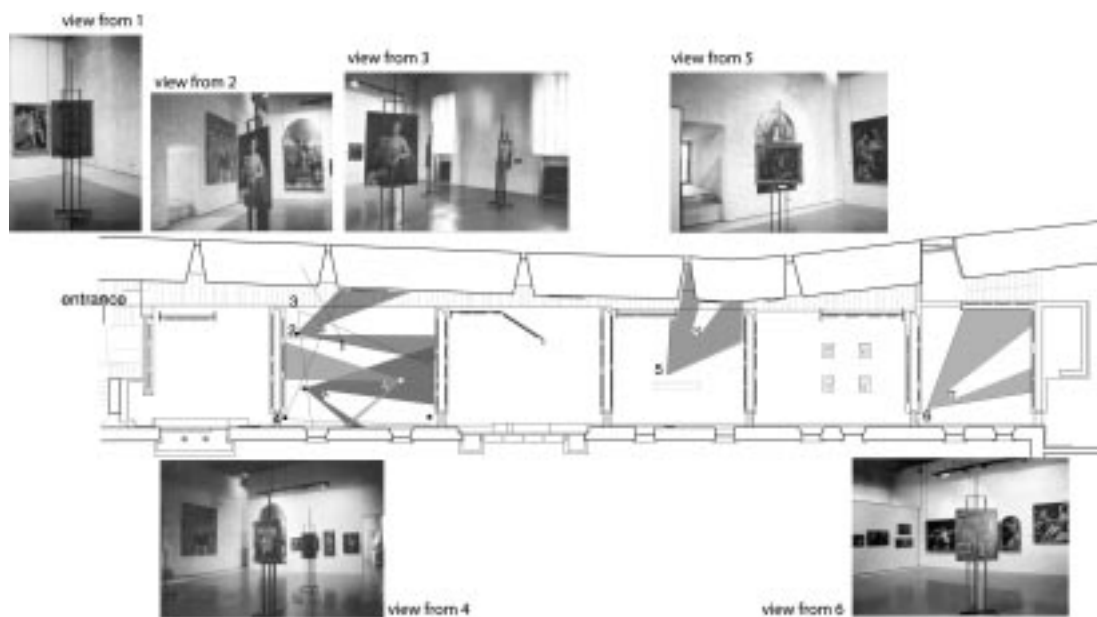


Figure 9: Placing paintings on free-standing outward-facing easels in the painting galleries creates overlaps between paintings situated at varying depths within the visual field

The frequent juxtaposition of paintings of different sizes is likely to cause visitors to continuously vary their distance from the walls, thereby also altering their perception of literal visual depth as it relates to their perception of painterly visual depth. Figure 10 shows a possible peripheral path linking the points from which paintings would be frontally visible within a 60° viewing angle. The line undulates quite substantially. At certain positions, it even bifurcates, as large paintings are hung over smaller ones. Thus, movement becomes more integral to seeing than would otherwise be the case. At the same time, the careful disposition of paintings on the transverse walls would encourage viewing from the middle of the room or an even greater distance, so that the entire wall surface is visible. Central viewing has the additional function of suggesting resonance between paintings located across from each other, as was often the case with frescoes in Italian churches in the 14th and 15th century, when the perspectival axes of paintings located on opposite walls were often made to match when seen from the middle of the room (White, 1993). Thus, the animation of the peripheral viewing line is one pole of a viewing system whose other pole would be the central area of the room.

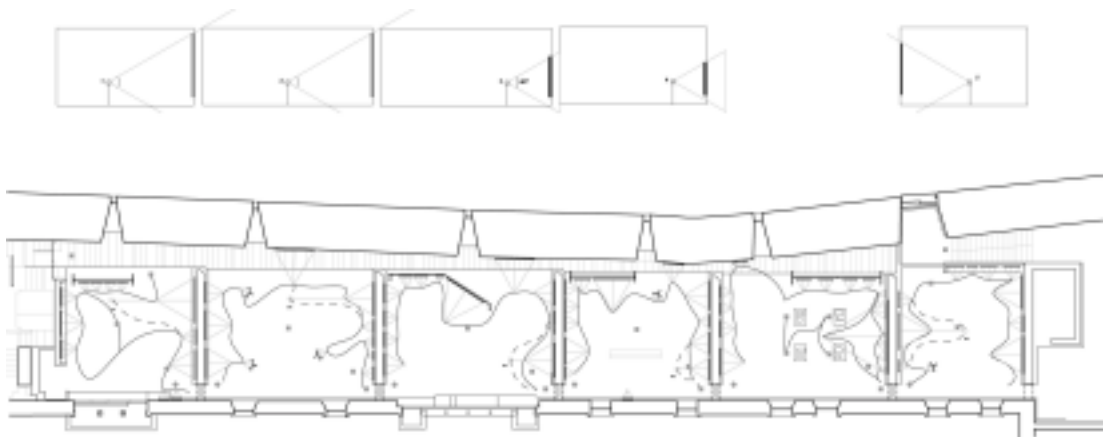


Figure 10: Possible path around the painting galleries. The path connects viewing points sustaining a 60° viewing angle to the paintings

A third way in which Scarpa plays with viewing distance is the positioning of paintings very near the edges of the transverse walls, close to the one or the other perspectival axes of movement. This means that paintings are first seen from a distance, as one enters a room through the door across, and then seen again at close range as one is about to leave. Usually, the close view is meant to highlight a detail, draw attention to an elaborate frame which is a work of art in itself, or simply recall a previous experience.

While the sculpture galleries are designed as fields of intersecting gazes, that are perceptually activated as a function of visitors' movement, the painting galleries are designed as fields of intersecting optical frames of reference, alternatively constructed by the paintings, the placement of the paintings and the disposition of architectural boundaries. In the former case, the embodied experience of movement virtually animates the statues, while immersing the visitor in a almost theatrical stage of expressions. In the latter, the embodied experience of movement intimates perceptions of overlapping spaces; or, to be more precise, the embodied experience of movement leads to a perception of overlapping optical frames of reference making intersecting claims over the same space. In both cases, however, the arrangement of the displays works integrally with the architecture, in order to suggest that the conjunction of movement and seeing, understanding and perceiving is brought under the authority of a design intention

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Museum space as a symbolic system: narrative and non narrative meaning

The design of the building is linked to the design of the exhibitions in multiple ways. We have already discussed aspects of geometry and the manner in which optical space interacts with the morphology of movement and the spatial structure of the layout. The tight connection between building design and exhibition design can be studied from additional points of view. For example, in the sculpture galleries, Scarpa has added a new floor surface which stops short of the old walls. He rendered it as a floating platform, inscribed by an irregularly spaced grid, implying a common and intentionally added base that places statues and visitors within a single frame of co-ordinate reference. Also, the floor in the painting galleries has been lowered, in a manner that turned balcony doors into windows, while also increasing the height from which light enters into the galleries. This has allowed Scarpa to design a low platform against the wall alternatively functioning as access, seat, or wall base. By implication, the whole wall is rendered as a visual composition, with windows themselves appearing as hung sources of light. The effect is made more evident by the placement of screens in front of the windows, aimed at diffusing and controlling the light. These look more like luminous translucent panels. By contrast, the windows in the sculpture galleries are allowed to provide strong directional light and sharp effects of shade, thus animating the statues. Such design moves are all responses to traditional requirements regarding the control of southern light in museum environments, but in this particular case, the manner in which they are handled is entailed within an overall logic of constructing museum space as symbolic system.

How does this symbolic system function? Our argument suggests that at Castelvechio, museum space supports an embodied and immersive pedagogy aimed at ways of seeing. In the sculpture galleries, visitors are so immersed in the field of

intersecting gazes, that they come to understand sculpture as a construction of space projecting from bodies and defined according to their surfaces. Works of art cease to be mere isolated or bounded objects and become generators of spatial qualities that can almost be entered, that is appreciated not only through seeing, but also through moving. Conversely, architectural space is defined as a field of co-awareness and co-presence, literal and virtual, sustained through the presence of people, and also sustained through the presence of art. In the painting galleries visitors come to perceive pictorial space, optical space and the spatial structure of movement as alternative frames of reference and understanding that interact and qualify each other. Seeing is thus experienced as a construction, an apt introduction of visitors to the idea of painting as art. Conversely, architectural space comes to be perceived as a space of multiple dimensions, topological, projective and metric, which entail each other in diverse ways implying that alternative frames of orientation and reference are possible.

These meanings, dependent as they are upon the embodied experience of space, are not narrative. They are deeply non-discursive, and structurally unrelated to the specific sequencing of the visit. This is all the more stunning given the extremely rigorous linear sequence of rooms. In parts, the linear sequencing is part of the inheritance that comes from working with an old building shell. In part, it is a deliberate design aim. For example, the sculpture galleries were originally entered from the middle of that side of the building, so that visitors could alternatively proceed to the left or to the right. Scarpa moved the entrance towards the corner of the courtyard, thus placing the rooms on a single sequence which allows no fundamental navigational alternatives. In addition to such architectural moves, there is an underlying historical and evolutionary logic to the way in which art is displayed. Thus, it is indeed possible to read a linear narrative into the exhibition. The stunning fact is that the fundamental meanings constructed by museum space as symbolic form operate over and above the narrative. While narrative often dominates museum layouts and exhibition designs, here it is made to look secondary, if not trivial, by comparison to the non-discursive pedagogical discourse.

At the simplest level, the structural device which subverts the primacy of narrative meaning is the creation of a secondary structure of folding, undulating, oscillating, encircling, locally intensified, differentiated, and qualified ebb and flow of movement, within the otherwise unilinear global sequence. Such pattern of movement brings most displays into view from several, and often distant, points in space, as part of several local sequences and frames of view. In the words of Guidi (1999), Scarpa avoids static viewing positions and creates cycles of viewing within cycles of time. Or, to paraphrase these words, Scarpa intersects cycles in space with cycles of time.

We have shown that to capture the subtler structure of movement, we have to complement the more frequently used modes of spatial representation and analysis that are associated with “space syntax” by modes of analysis that originate in other discourses, and to seek creative ways of linking them, conceptually and methodologically. Indeed, if we are to understand how visual fields and structures of movement interact with modes of seeing and understanding, we have to engage representations that are integral to what is being understood. While such methodological and theoretical innovation might be very fruitful for the development of museum studies, as illustrated here, it would also hold much broader significance. The theories of spatial morphology associated with “space syntax”, meet with recent theories of embodied cognition (Lakoff and Johnson, 1999) and theories of perception (Gibson, 1986) precisely at the interface between treating movement as the key mechanism towards the intelligibility of the spatial environment as a domain of literal co-presence, encounter, and orientation, and treating it as a basis for intuiting or understanding more abstract structures of thought or feeling. The perceptual, optical, social and architectural frames of spatial reference discussed in this paper are also situated at this interface. Hence, the larger potential relevance of our study, but more importantly, of the work of Carlo Scarpa.

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To which work we now return. Figure 1, shown above, situates the galleries we have studied within the overall plan of the museum. The sculpture and painting galleries discussed above are set within the Napoleonic wing of Castelveccchio. At the opposite end of the Napoleonic wing with respect to the museum entrance, in a roofed but otherwise open space, Scarpa has situated a major display, the statue of Cangrande della Scala, an eminent member of the Scaligeri family that founded Castelveccchio. The statue is visible from the courtyard, as well as along the exhibition path, when visitors cross from the sculpture galleries towards the exhibitions in the Reggia wing, and also when, cross back from the Reggia towards the painting galleries. From close by, the statue appears imposing, sometimes perhaps threatening, but almost always above and to the side of the visitor. Just before entering the first room of the paintings gallery, it is possible to look across towards the statue. This is a rare moment when the visitor is level with the riding knight and the only moment when the face of the knight is frontally seen, clearly smiling. From a balcony just below, the statue is visible as if on a pedestal, as it would have stood originally in a public square. Thus, the placement of the statue suggests, at the global scale of the building as a whole, the same pattern of repeated, returning, and enfolding movement as is created inside the galleries. As visitors make their way towards the final set of exhibits, these patterns of movement allow a perception of facial expression which inserts what otherwise was a recurrent point of reference into a momentary encounter, itself distinctively underplayed. It is as if, at this moment and upon this stage, the

shift from a visual reference to a virtual embodied encounter is meant to inscribe the symbolic space of the museum –both art and memory- between an enclosed courtyard and the adjoining flow of a river.

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