Sequences in architecture: Sergei Ejzenštejn and Luigi Moretti, from images to spaces

The article ‘Montage and Architecture’ by Sergei Ejzenštejn, written between 1937 and 1940 and published posthumously, is one of the pivotal texts theorising montage as a method of composition, with a special focus on the potential of cinematic sequences in architecture. Despite the deep interest and the great number of studies that the publication of this text inspired in the last decades, Ejzenštejn’s analysis of the Basilica of Saint Peter, which occupies almost half of the article, has been overlooked. This article focuses on Ejzenštejn’s sequential interpretation of the Basilica and compares it with the one offered in 1952 by Luigi Moretti in the article ‘Strutture e Sequenze di Spazi’ ['Structures and Sequences of Spaces']. Examining Ejzenštejn’s and Moretti’s texts and related visual products, it develops a different way of considering the sequential qualities of the Basilica. Indeed, while Moretti proposes sequences as a method to design and represent three-dimensional spaces, the concept of montage as theorised by Ejzenštejn focuses on two-dimensional sequences as a tool to arrange images in space. The article proposes a series of possible common points between Ejzenštejn’s and Moretti’s theories, on the basis of a shared vision of sequences as mental constructs, and engages with a wider discussion on the dilemma between visual and spatial properties of architecture.

Introduction

Montage is a key theme of modern architecture and, despite several recent theoretical reinterpretations of the concept, its origins lie in the context of the twentieth-century avant-garde and in its relation with cinema.¹ Probably the most relevant text about montage and architecture is the essay by the Russian director Sergei Ejzenštejn, ‘Montage and Architecture’, published in English in the journal Assemblage in 1989.² As Davide Deriu has pointed out: Architectural historians have also paid increasing attention to montage at least since the 1980s, when its fundamental role in modernist avant-garde was ascertained. The English publication of a hitherto little-known essay by Sergei Ejzenštejn (written half a century earlier) contributed perhaps more than anything else to reposition this concept on the intellectual map of Anglophone architectural studies.³

Carla Molinari
School of Architecture
Leeds Beckett University
UK
c.molinari@leedsbeckett.ac.uk
ORCID 0000-0002-1892-6325

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Before and after this publication of ‘Montage and Architecture’, Ejzenštejn’s theories have attracted the attention of several architects and scholars, from Le Corbusier to Bernard Tschumi, and from Manfredo Tafuri to Anthony Vidler. More recently, Martino Stiëlri has put forward an interpretation of Ejzenštejn’s theories in an entire chapter of his book Montage and the Metropolis: Architecture, Modernity and the Representation of Space (2018). According to Stiëlri:

The Soviet filmmaker and theoretician Sergei Ejzenštejn was certainly not alone among his avant-gardist colleagues when he assessed the potential of cinematic montage for rethinking the problem of representation. However, Ejzenštejn’s contribution stands out, mainly for two reasons: first, unlike anyone else, he consistently worked toward a comprehensive theory of filmic montage throughout his entire career as a director […] Second, Ejzenštejn’s take is of particular interest in our context because he frequently refers to architecture and urbanism as pre-cinematic media. However, as Stiëlri also points out, little interest has been given to Ejzenštejn’s interpretation of the Basilica of Saint Peter in ‘Montage and Architecture’. The majority of scholars avoid discussing this part of the Russian director’s essay, regarding this case study as irrelevant in architectural terms. In his introduction to the article in Assemblage, Yve-Alain Bois underlines how the analysis of Saint Peter’s is “disappointing from an architectural point of view”. Indeed, Ejzenštejn’s analysis of the Basilica focuses more on sculpture than on architecture; the Russian director devotes 48% of his article (c. 3600 out of 7500 words) to the interpretation of the four plinths at the base of the columns composing the baldachin by Gianlorenzo Bernini, which is placed under the major dome, in the heart of the Basilica.

Yet, why does Ejzenštejn dedicate almost half of his essay to analysing a sculpture, instead of concentrating on the magnificent architectural qualities of the Basilica? What does this decision tell us about Ejzenštejn’s interpretation of cinematic sequences and, more importantly, about his assessment of space in relation to montage? This article addresses these questions, using Luigi Moretti’s sequential analysis of the Basilica of Saint Peter in his article ‘Strutture e Sequenze di Spazi’ ['Structures and Sequences of Spaces'] as a point of comparison to further investigate the role of sequences as a method to design and represent space, potentially overcoming the strict relationship with cinema and the visual realm. Despite the numerous differences between the approaches of Moretti and Ejzenštejn, this article develops a systematic analysis of the two articles, focusing on the language and techniques of representation utilised by the two authors to describe sequences, and identifies some common points in their theories.

Sergei Ejzenštejn, ‘Montage and Architecture’

The essay ‘Montage and Architecture’ was written by Ejzenštejn between 1937 and 1940; it was published in English in 1989, with an introduction by Yve-Alain Bois. This text should be considered in relation to Ejzenštejn’s primary aim to write a general theory of montage, in the late 1930s. After theorising different kinds of montage (such as ‘intellectual’, ‘metric’, and ‘rhythmic’) in
the 1920s, Ejzenštejn started looking at the possibility of defining the history of montage. He argued that montage is not a new invention of the avant-garde, but a compositive method that can be traced in all visual arts, today as in the past.9

‘Montage and Architecture’ is divided into several parts, focusing especially on the role of composition in sequence — or montage — with reference to the field of architecture. After a brief introduction to the world of art, Ejzenštejn defines architecture as the ancestor *par excellence* of cinema, and explores several examples to support this thesis. In particular, he analyses the Acropolis of Athens starting from its famous description by Auguste Choisy;10 he then examines some Catholic buildings including the Holy Mountains; lastly, he delves into the details of the sculptural elements of the baldachin of the Basilica of Saint Peter (1623–1634) in Rome by Gianlorenzo Bernini.

The system of comparison between cinema and other disciplines, which can be traced throughout the body of the theoretical work produced by Ejzenštejn, is aimed at highlighting the enormous potential of the concept of montage as a sequential process of elaboration through images that is applicable across the arts.11 Over the years, the Russian director proposed various analyses and interpretative readings, reaching the point of defining montage as a truly interdisciplinary compositional method. Montage is not considered by Ejzenštejn as an automatic juxtaposition of a series of images, but as the ‘law of the structure of the object’.12 Montage is therefore an interdisciplinary, and also intellectual, instrument of construction that renders possible the organisation of a series of forms through a signifying scheme.

At the basis of the composition of its ensemble, at the basis of the harmony of its conglomerating masses, in the establishment of the melody of the future overflow of its forms, and in the execution of its rhythmic parts, giving harmony to the relief of its ensemble, lies that same ‘dance’ that is also at the basis of the creation of music, painting, and cinematic montage.13 This interdisciplinary approach could lead to dangerous contaminations, as underlined by Bois.14 But on several occasions, Ejzenštejn explicitly expressed his desire to demonstrate the procedural autonomy of editing in sequence, highlighting some of the main compositional characters beyond disciplinary boundaries, and especially without losing the essence of individual arts.15 In ‘Montage and Architecture’ in particular, Ejzenštejn lays the foundations for a key comparison between architecture and cinema, starting from the concept of montage as a method of re-composing fragments, which has then been taken up by different designers and theorists.16 He compares architectural composition to cinematic montage, underlining how both disciplines are related to the main aim of producing ‘spatial constructions’.17

**Sergei Ejzenštejn, the Basilica of Saint Peter**

Ejzenštejn’s analysis of Gianlorenzo Bernini’s baldachin in Saint Peter’s focuses on the eight sculptural images at the base of its famous twisted columns
On the outer sides of the base of each of these four columns, Bernini created effigies of members of Pope Barberini’s family. The particularity of the work lies in the evident variation between the eight images: more specifically, the face of a woman placed at the top of the shield, is always represented with different expressions. This variation has led to the development of many interesting theories aimed at understanding the reasons behind it. The most accredited of them considers the different faces as illustrations of the stages of childbirth. Ejzenštejn himself seems to be especially interested in the various critical interpretations, as he refers to them in his article. In any case, regardless of the real meaning or content hidden behind the sculpture, the compositional structure used by Bernini is fundamental for the Russian director. The presence of the eight different images induces a necessary movement around the baldachin: only in this way is it possible to understand the work in its entirety. As Ejzenštejn characteristically notes:

The answer to the riddle lies entirely in that the full picture, the true ‘image’ of this montage statement only emerges in the sequential juxtaposition of its constituent ‘frames’. Each shield, in itself means nothing. Viewed in isolation, it is dumb. […] In themselves, the pictures, the phases, the elements of the whole are innocent and indecipherable. The blow is struck only when the elements are juxtaposed into a sequential image. The placing of the shields — or rather their ‘displacing’ — around the four plinths, at right angles and at six meters distance from each other, together with the need to walk round the whole vast quadrilateral of the canopy and to begin from one particular corner (the left-hand front pillar) — these are the factors that make up the cunning separation of the eight montage sequences.

The order in which the eight different faces are arranged is not random; a deliberate compositional sequence organises the succession of expressions to tell a story: the woman’s face shows increasing suffering up to the last image of the newborn. There is therefore a precise order to follow, a pre-established movement that is necessary for understanding the work.

Despite the general lack of interest in this interpretation of the baldachin, this study is actually key to further understand the spatial sequences proposed by Ejzenštejn for two main reasons. On the one hand, the composition, even if articulated in four-dimensional space, is somehow limited to the arrangement of a series of elements — pictures, frames, images — that are simple surfaces; they do not have their own volumetric substance. Although Ejzenštejn tries to approach architecture in a specific way, within the discipline, his evaluation of space seems to remain tied to the two-dimensional frame of the camera. His ‘cinematism’ constrains architecture to serving as a locus of visual representation; it is explored in its three dimensions only because it offers a possibility of movement subordinated to the articulation of the choreographic path constructed by the images. On the other hand, this striking example further clarifies Ejzenštejn’s idea of montage applied in architecture. It shows that, despite the swirling baroque volume of the baldachin, what really drives the observer to walk around the baldachin is the meaning that underpins the experience — it is the narrative line that makes the movement necessary, in order for the visitor to
recompose and understand the sequence of different shots. In this complex relationship between images, bodily movement, and meaningful experience, we recognise how Ejzenštejn’s approach draws on the German aesthetic theories developed at the end of the twentieth century, and specifically that of August Schmarsow, as suggested by Martino Stiërli. These theories proposed a novel idea of space that is not simply defined by geometry, but by the subject’s psychophysiological elaborations, based on corporeal sensations and cognitive processes. More specifically, Schmarsow considers ‘visuality as key to a fully embodied experience of [...] architectural structure’, while also stressing the more complex idea of an ‘intuited form of space’ consisting ‘of the residues of sensory experience to which the muscular sensations of our body, the sensitivity of our skin, and the structure of our body all contribute’. In several instances, Ejzenštejn expressed a similar interest in the psychophysiological reactions to montage, emphasising how the entire human body is part of the cinematic experience. Describing the Holy Mountains in ‘Montage and Architecture’, he wrote:

The business of climbing that distance is particularly impressive because it is the custom to go from ‘station’ to ‘station’ and on up to the very top — on one’s knees. The emotional reaction from stopping place to stopping place thereby increases with the pilgrims’ ever-increasing physical exhaustion.

Analysing the baldachin, Ejzenštejn carefully considered how the ‘displacing’ of the frames ‘at right angles and at six meters distance from each other’ can influence the spectator’s pace and overall understanding of the sequence. Exactly like Schmarsow, Ejzenštejn recognises the significance of movement and bodily perceptions in processing the full emotional experience of cinematic forms in space, beyond the role of sight alone.

Luigi Moretti, ‘Strutture e sequenze di spazi’

Luigi Moretti’s 1952 article ‘Structures and Sequences of Spaces’ is another fundamental study of sequences in architecture. The aim of this text is to utilise the idea of sequential order to exalt the central role of empty space as a locus of experience in architecture. Following the critical line already firmly traced in Italy by Bruno Zevi at the time, Moretti considered the void, or inner space, as the primary element of the project; he regarded it as a material to be shaped and defined through volumes and surfaces, and not as a simple result of their manipulation. To highlight the qualities and characteristic aspects of the hollow space inside buildings, Moretti uses various examples borrowed from the history of architecture, without distinguishing between epochs, styles, or typologies, and considers them according to the concept of sequences. In fact, what interests him is the experience obtained from the variations between spaces, to understand how — by changing itself — the void intervenes on the perception we have as we move through architecture.

And so, a study on the composition of these spaces and of the emotional course that their sequences suggest to us can perhaps bring to light certain points of the
obscure law that universally guides the human spirit and drives great souls to compose such extraordinary architecture that moves even the minds of the simplest beholder.  

As Moretti points out, his evaluations of ‘experiential meaning’ are linked specifically to the figurative terms of architecture. He is aware of the limits of these abstract considerations, which are disconnected from other variables of the project. But he defends their value in the critical analysis of the work, if this is followed by a contextualisation that can lead back to the overall vision. Moreover, according to Moretti, the very theme of the internal hollow space is so central for architecture that even an analysis conducted solely on this parameter would be significant for evaluating the quality of the design. This is because many aspects — or ‘spatial effects’ to use an expression of Emil Kaufmann — refer to, or reveal, singular features of the matter, while the void remains the negative of everything: a specular value capable of summarising all spatial effects by contrast and opposition.

I would like to limit this investigation to spatial unities formed by interior volumes that are composed in a certain order and that constitute, in their succession with changing perspectival effects and in relation to the courses and times necessary and possible for viewing them, a true sequence in the actual meaning of the term. Of these volumes, coordinated in unity, I intend to clarify the modalities of their succession and, therefore, the structure of their composition; that is, their type and the reasons for the concatenation of their volumes.

Moretti carries out a careful analysis of the modulations and variations of parameters in a series of case studies, highlighting the composition of spaces according to the logic imposed by various sequences. He defines four specific parameters — or qualities specific to the empty space — through which to evaluate and compare the architectural works under examination: first, the geometrical shape, simple or complex; second, the size, or amount of absolute volume; third, the density, depending on the quantity and distribution of light that permeates the space; and fourth, the pressure or energetic charge, according to the proximity, more or less incumbent, of the constructive, confining masses, and of the ideal energies that they emit. The last one is a quality comparable to the pressure of a fluid in constant motion, subject to the obstacles and oppositions it encounters, or even to the potential of a space in relation to the electrical charges that affect it.

**Luigi Moretti, the Basilica of Saint Peter**

The case studies proposed in the article ‘Structures and Sequences of Spaces’ are analysed in detail starting from the parameters explained above: the sequences defined by Moretti are based on the composition of spaces in succession, which vary from each other according to one or more of these four terms. In the first instance, Moretti illustrates simpler sequences, where only one of the parameters is taken into consideration, such as the ternary group of Villa Adriana, where variations in the geometric shapes of the volumes create the succession, or the Palazzo Ducale in Urbino, in which the dimensions
and proportions of the spaces vary. He then considers more complex and
articulated sequences, where the succession is determined by the modulation
of several parameters at a time, as in the churches of Guarino Guarini.33

Moretti considers the sequence found in the Basilica of Saint Peter in Rome to
be one of the most complex. In this case, Moretti focuses on the succession of
rooms that lead from the entrance to the internal space under the majestic
dome (Fig. 2). From the piazza, there is a first constriction element, the five
access doors or pressure points, and immediately beyond them a first limited
expansion in the atrium, accompanied by a vague sense of loss due to the longi-
tudinal arrangement of the walls. This leads to a new barrier and pressure
point, with a second series of forced entrances. After this second pause, we
finally enter the immense and exceptional nave, with a crescendo of the
volume dilated and widened into the dome.

Considering the spatial quality of the sequence, Moretti describes how,
unlike the ternary group of Villa Adriana, in the Basilica of Saint Peter spaces
in succession differ not only for their geometric shape, but also for variations
of size and pressure, which create a complex sequence. Indeed, in the
ternary group of Villa Adriana (composed by the portico of the Pecile, the
square hall known as the Aula dei Filosofi, and the circular natatorium), the
sequence is simply based on the variation of geometric shapes: prism, cube,
and cylinder. In the case of Saint Peter’s, in contrast, three parameters
change and create the sequence. The first variation is the one of geometric
shapes, in this order: transversal prism, longitudinal prism, sphere. The
second one is a crescendo of sizes: from the ‘great atrium’ to the ‘immense
nave’, until the ‘empyrean of the cupola’. The last change is that of pressure:
‘pressure (entry door), limited liberation (atrium), opposition (atrium walls),
brief pressure (basilica doors), total liberation (transversal of the nave), and
final contemplation (space of the central system)’.34 The differentials — of geo-
metry, size, and pressure — involve an alternation of oppositions and reliefs
that constitutes a rhythmic sequence, capable to form empty spaces with
more varied characteristics: ‘This pendularity has such a dominant and exclusive
rhythm that it seems to reveal the movement, the very breath, necessary to the
structure of the human spirit’.35

Of equal interest is the consideration of the connecting points between
the elements making up the sequence, which Moretti identifies in the
narrow openings, or doors. These define the lyrical ‘caesuras’ that interrupt
the rhythm and act as pivotal points to highlight the passage from one
space to another.36 We find these ‘caesuras’ between spaces, particularly
in the case of the sequence in the Basilica of Saint Peter; they regulate
the path of access and create a gradual process of abstraction, which
leads to contemplation, to the empyrean empty space par excellence of
the dome.

Unlike Ejzenštejn’s idea of a sequence of images, linked to the visual
aspect of experience, here the elements placed in sequence — the
spaces of the Basilica — are evaluated by Moretti according to their archi-
tectural qualities in a volumetric sense; they are no longer considered only
as images or two-dimensional surfaces. However, despite these differences, both authors consider sequences as an instrument of composition capable of involving not only the human body, but also its emotional and cognitive perceptions. After all, Moretti also recognises the starting point of his theoretical assumptions in the works of German scholars of aesthetics, directly referring to Friedrich Ostendorf, Albert Erich Brinckmann, and August Schmarsow in his article. Moreover, defending space as the core of architecture, the Italian architect is placing himself within a debate that had started in Germany but went far beyond, developed by Zevi and several other scholars of the interwar period, such as Sigfried Giedion, Nikolaus Pevsner, and Geoffrey Scott.

A comparison of sequential constructs

A thorough analysis of the language, means, and techniques utilised by Ejzenštejn and Moretti in their articles, allows us to further explore their positions through a systematic comparison. The goal here is to juxtapose the two authors’ investigative methods, highlighting similarities and differences in their theoretical positions, to produce a wider discussion on sequences in architecture.

In Ejzenštejn’s ‘Montage and Architecture’ there is an intense and reiterated use of the terms related to the visual realm, such as ‘eye’, ‘view’, and ‘image’. The incipit of the article best exemplifies this:

[When talking about cinema], the word path is not used by chance. Nowadays it is the imaginary path followed by the eye and the varying perceptions of an object that depend on how it appears to the eye. Nowadays it may also be the path followed by the mind across a multiplicity of phenomena, far apart in time and space, gathered in a certain sequence into a single meaningful concept; and these diverse impressions pass in front of an immobile spectator. In the past, however, the opposite was the case: the spectator moved between [a series of] carefully disposed phenomena that he absorbed sequentially with his visual sense.

Ejzenštejn here explains his intentions to compare cinema to architecture on the basis that both arts share the ‘eye’ as a device that allows the ‘spectator’ to sequentially understand the ‘phenomena’. All these terms indicate a sequential experience mostly based on a visual perspective. Even the architectural sequence, defined in the last sentence, is perceived through the spectator’s ‘visual sense’. As suggested by Anthony Vidler, Ejzenštejn is comparing architecture and cinema through a ‘spatial eye’.

On the other hand, an analysis of Moretti’s article enables us to identify a very different use of terms. More specifically, in the first half of ‘Structures and Sequences of Spaces’, Moretti sets his analytical research parameters, defining his vocabulary and related contents. The article begins with the elements of architecture that inform his analysis:

Architecture is understood through the different aspects of its form, that is, in the terms in which it is expressed: chiaroscuro, constructive fabric, plasticity, structure
of internal spaces, density and quality of materials, geometric relationships of surfaces, and other terms more remote, such as colour, that from time to time may be asserted according to intangible laws of resonance.  

From the outset, in Moretti’s language we can indeed retrace his two cultural souls, as defined by Letizia Tedeschi, one related to a strong humanistic passion, in particular for ancient and Baroque history, and the other tied to a scientific mind, that often characterises his theoretical approach. Therefore, in his article, we find terms such as ‘structure’, ‘density’, ‘resonance’, and also ‘weight’, ‘energy’, ‘magnetic field’, and ‘potential distribution’. Borrowed from a techno-scientific vocabulary, these are used to develop a proper analytical research and support the rigour of Moretti’s proposed theory. Terms such as ‘chiaroscuro’, ‘plasticity’, ‘mass’, ‘quantity of volume’, together with the selection of case studies, show Moretti’s great passion for Baroque and sculptural spatial properties.

When we compare the two authors’ linguistic choices for defining spatial sequences and their qualities, we trace an evident series of differences. The Russian director’s selection of words is indeed closer to the visual, two-dimensional realm of the camera, while in Moretti’s case words more properly describe the volumetric, architectural aspects of space. But when we further analyse the articles, focusing on the two authors’ descriptions of their case studies in particular, we also identify some important shared aspects.

After the introduction, where he synthetically defines art’s historical progression in relation to sequential properties, Ejzenštejn grapples with his two main examples: Auguste Choisy’s interpretation of the Acropolis, and Gianlorenzo Bernini’s baldachin. It is interesting to consider these case studies together to underline two common points. First, Ejzenštejn considers both cases from other scholars’ perspectives; he never had the chance to visit either of them in person. Considering this, we should not think that Ejzenštejn decided to focus on the baldachin ‘instead of discussing the “maternal” space of the church, as suggested by Bois.’ We can argue that he discovered the studies about Bernini’s sculpture and simply found them interesting. This is not a deliberate selection between two things: Ejzenštejn never had to physically cross the Basilica before seeing the baldachin. Second, Ejzenštejn looks at these œuvres as films, and he literally asks the reader to do the same. In this sense, he looks at the space of both examples through the synthetic, compressed vision of the camera lens.

However, another important difference between the analyses of the two case studies is their length. The first one occupies a little more than three pages, two of which are devoted to Choisy’s text that Ejzenštejn quotes in full, while the second one is about seven pages long. Ejzenštejn’s examination of the baldachin is so long and dense, because he thoroughly investigates the meaning and the reasons behind the variation between the eight shields. If Ejzenštejn here is still using terms related to film, such as ‘shoots’ and ‘montage’, in this case he is also using other relevant words, such as ‘drama’, ‘meaning’, ‘significance’, ‘story’, ‘allusions’, ‘satyr’, ‘sarcasm’, and ‘scope’. These words, and the length of the text they occur in, reveal Ejzenštejn’s
key interest in the story and in the experiential meaning behind the shoots, or frames, that compose the sequence.

In a similar way, Moretti is not only interested in the ‘composition of these spaces’, but also in the ‘emotional course that their sequences suggest to us’. More specifically, if we consider the four parameters defined in ‘Structures and Sequences of Space’, there is one term that seems to be the most relevant and ‘the most innovative quality because of its physical and emotional character’; and that is ‘pressure’. In particular, describing the Basilica’s sequence Moretti underlines how the parameter of pressure changes between the different spaces crossed, affecting the observer’s emotions. Going beyond the morphological analysis, Moretti also explores the experiential meaning of the building, showing his humanist cultural approach to architecture that ‘involves investigating, understanding, and representing human life’, as suggested by his nephew Tommaso Magnifico. More specifically, Moretti reads in the Basilica of Saint Peter a sort of passage from a human perspective and earthly dimension (represented by the narrow entrance) to the most sublime emotion of abstraction and ecstasy (the dome). His article proposes reading this sequence as a path of human formative experience, from hostility to the reception of life and nature. To highlight this meaningful aspect of the Basilica, Moretti uses two narrative episodes as his main examples: the escapes of Herman Melville’s hero from the mythical island of Typee, and the liberation from prison in the film Variété by Ewald André.
Moretti himself considers sequences as narrative tools to be applied to different disciplines, in particular paintings and sculpture. When he writes about another famous sculpture by Bernini, he is also describing a sequence: whoever circumnavigates the abstract world of the Fountain of Rivers, moving from one figurative island to the next, crossing seas and rhythmic spaces, sometimes narrow and sometimes deep, sometimes grandiose, sometimes crazily minute, is, afterwards, like a god who contemplates his living cosmos stilled in time and isolated in space.

For both authors, the meaning of sequences is ultimately determined by the subject’s perception and experience. Ejzenštejn ‘was indeed extremely concerned about the efficiency of films as forms to interact and involve people in the deepest and most perturbing ways’. From his first theory of a ‘Montage of Attractions’ to his latest works, we can read Ejzenštejn’s attempt to maintain the expressivity and emotional features of films against some tendencies then promoted by other exponents of avant-garde cinema, such as Hans Richter and Dziga Vertov, among others. In a similar way, Moretti’s interest in what moves the ‘human spirit’ is not conveyed only in his theoretical positions but also in some of his architectural works. These reveal an attraction ‘for Expressionism and for focusing on the organic rather than the geometric’, supporting ‘an architecture of motion and emotion’.

Again, if we concentrate on the visual apparatus of the two articles, we will spot huge differences at first glance. For Ejzenštejn, drawing has always been a key tool. Some of the numerous drawings he produced during his career are more intimate, while others are proper diagrams that enable him to compose his films, or become tools to analyse and study the works of others. In ‘Montage and Architecture’, we find sketches — rather than proper drawings — that belong to this third category. To represent the baldachin, Ejzenštejn utilises four main sketches. Three of them can be read as a sequence of close-ups: starting from identifying the sculpture at the base of...
the column as the main object of the investigation (Fig. 3), followed by the drawing of the relief on the same base (Fig. 4), and leading to the detail of the Pope’s crown (Fig. 5). His last sketch is a diagrammatic plan used to show the distribution of views in space, whose sequential order is indicated by numbers from one to eight. In this sense, the plan seems to serve merely as an organisational scheme, while the elevations — or series of close-ups — more properly replicate the experience of the spectator. As argued by Steven Jacobs, Ejzenštejn ‘elaborately discussed the inscription of time in a static picture and the sequential nature of aesthetic perception’.59

Moretti also explored a broad variety of visual representation systems during his career. In ‘Structures and Sequences of Spaces’ he uses diagrams and models made by himself that clearly refer to the volumetric space and its complex perception. The models, in particular, are significant and fascinating illustrations of the buildings described, representing the interior of the architectural examples. They are physical concretisations of the void, three-dimensional negatives of the architectural space that clearly refer to the Zevian lesson, and in particular to the graphic tables accompanying the third chapter of Zevi’s book Architecture as Space: How to Look at Architecture, first published in Italian in 1948.60 The ensuing effect is surprising; Moretti’s images are reminiscent of contemporary virtual models that highlight with extreme clarity the physical and material consistency of space, which seems anything but empty. In particular, the models of the Basilica of Saint Peter seem intent to explain the volumetric differentiations, from the most precisely detailed variation (Fig. 6) to the most complex whole sequence (Fig. 7). As argued by Viati Navone, Moretti’s plaster models follow ‘a graphic metalanguage, more useful for describing architectural spaces than the verbal language and canonical plans’ already developed by ‘August Schmarsow, Albert Eric Brinkmann, Paul Frankl, Hans Sedlmayr, but also by Vincenzo Fasolo, his professor at the school of architecture in Rome’.61

Despite the two authors’ different approaches in visually representing sequences, if we concentrate on Moretti’s plan diagram of the Basilica of Saint Peter (Fig. 8), we find some similarities with Ejzenštejn’s sketch plan of the baldachin (Fig. 9). Both are diagrammatic plans, abstracting the sequences, and proposing the elementary forms that induce to movement. In both drawings, the sequential order is underlined by figures (letters or numbers); the experience is perfectly synthesised as a balanced, carefully studied rhythm of variations.

Both authors are looking to their case studies for parameters, however different, that may vary (or not) from one element to another, finally creating the ‘montage effect’. The physical and cognitive sequential experience is designed as a juxtaposition of elements — or ‘collision of shots’, and the figures used in their sequential drawings express a variation between these elements. Ejzenštejn wrote:

The shot is a montage cell. Just as cells in their division form a phenomenon of another order, the organism or embryo, so, on the other side of the dialectical leap from the shot, there is montage. By what, then, is montage characterized

Figure 7. Luigi Moretti, Plaster model of the Basilica of Saint Peter, in Luigi Moretti, ‘Strutture e sequenze di spazi’, Spazio, 7 (1952–1953), p. 17, courtesy of Professor Architect Francesca Romana Stabile (private collection)
and, consequently, its cell—the shot? By collision. By the conflict of two pieces in opposition to each other.62

Compare Moretti:

The qualities of reality — that is to say, the form — arise from a complex of differences that are connected and follow one another in a certain order — a rhythm that constitutes the law of form itself. The group, in a mathematical sense generated by the differences, defines the form and therefore the quality. The group itself is not a quality but rather a complex of pure relationships between undifferentiated elements — elementary signs.63

Despite the differences in language discussed above, we can trace in the words of both Ejzenštejn and Moretti a common idea of ‘form’, or ‘reality’, which is defined through a variation between elements. This variation is the core of sequential constructs for both authors; without it, we cannot physically and cognitively elaborate the sequences that constitute spaces.

**Conclusion**

Sequences have been used in architecture since ancient times: the idea of composing a series of spaces following a specific order has often been considered an important feature of buildings. For Bernard Tschumi:

Sequences of space, configurations-en-suite, enfilades, spaces aligned along a common axis — all are specific architectural organizations, from Egyptian temples through the churches of the quattrocento to the present. All have emphasized a planned path with fixed halting points, a family of spatial points linked by continuous movement.64

The tremendous impact that montage and Ejzenštejn’s theories had on architecture, from the beginning of the twentieth century to the present, demonstrate the still vivid interest of architects in sequential constructs. The comparison pursued here between the two articles ‘Montage and Architecture’ and ‘Structures and Sequences of Spaces’ showed how sequences can be tied to images, especially if these are developed through the concept of montage. Yet, they can also be volumetric, eventually providing specific tools that enable architects to transgress the purely visual realm, and focus on the more complex design of space and its qualities. If Ejzenštejn considers the Acropolis a perfect example of ‘ancient film’, Moretti considers Greek architecture irrelevant for his discourse, as it is ‘an algorithm of structures beaten by the sun’.65 The Italian architect prefers to look at the masses and volumes of ancient Roman and Baroque architecture, because these can provide the most vivid sequential experience of space, in his opinion. On the other hand, the Russian director is interested in an architecture that can synthesise (without necessarily reducing) the whole complexity of physical experience to a series of images or perspectives. In this sense, one of the most famous quotes from Ejzenštejn’s article, frequently mentioned by architectural scholars to highlight architecture’s cinematic qualities, should be probably interpreted differently.

Painting has remained incapable of fixing the total representation of a phenomenon in its full visual multidimensionality. […] Only the film camera has solved the
problem of doing this on a flat surface, but its undoubted ancestor in this capability is — architecture. If we read this carefully, we can understand that Ejzenštejn does not want to simply underline the ‘capability’ of architecture here: he is referring to the huge power of cinema in ‘solving the problem’ of representing ‘a phenomenon in its full visual multidimensionality’ on ‘a flat surface’. In this sense, architecture is the old, ancient art that relies on real space — and its physical limits — while cinema is a brand new art that can properly represent the phenomena, synthesising spatial complexity through the screen. This is why the baldachin is an ideal case study: it tells a story in space — so it is an architectural object in Ejzenštejn’s view — compressed into a series of frames.

Despite several evident differences, Moretti and Ejzenštejn would have probably agreed with Schmarsow that ‘the experience of space is a combination of stored mental images and impressions perceived through ocular/bodily movement’. It is exactly in this ‘ocular/bodily’ complexity that we can trace the issue of the dichotomy of ‘an architecture as space versus an architecture as image’ that ‘may not have to be seen as so fundamentally antagonist altogether’. In this sense, we must recognise that both authors contribute to the development of the same critical line on the assessment of space. Starting from German aesthetic theory and its vision of space as a mental construct through the later developments of the same concepts by Giedion and Zevi, this assessment finally reconsiders the role of time in relation to space, thus creating the chance to reevaluate the entire body and all its senses. Defining the concept of sequences according to this theoretical frame, Moretti and Ejzenštejn seem to share an interpretation of a sequential method of composition as the only design process that can actually transcend the physical space to finally create mental constructs, and modulate the emotive and intellectual perception of forms.

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Notes and references

1. Davide Deriu, ‘Montage and Modern Architecture: Giedion’s Implicit Manifesto’, Architectural Theory Review, 12.1 (2007), 36–59.
2. A first publication of Ejzenštejn’s essay is traceable in Sergei M. Ejzenštejn, Izbrannye proizvedeniia v shesti tomakh, II (Moscow: Iskusstvo, 1964). It was later published in an Italian edition of Ejzenštejn’s writings under the title ‘Percorsi architettonici: L’Acropoli e l’Altare...”
del Bernini’, *Teoria generale del montaggio*, ed. by Pietro Montani (Venice: Marsilio, 1985), pp. 78–102. Translated by Michael Glenny, it was then published in English under the title ‘Montage and Architecture’, *Assemblage*, 10 (1989), 111–31, and republished in *Towards a Theory of Montage*, II, ed. by Michael Glenny and Richard Taylor (London: I.B. Tauris, 1991), pp. 59–81. The title ‘Montage and Architecture’ appears for the first time in the English version of *Assemblage*. However, as specified by Yve-Alan Bois in the introduction to the article, the authorship of the title remains uncertain.

3. Deriu, ‘Montage and Modern Architecture’, p. 37.

4. Le Corbusier met Ejzenštejn in Moscow in 1928; for their encounter and the ways in which montage influenced Le Corbusier’s architectural thinking, see Hubert Damisch, ‘Moderneité’, in *Le Corbusier: Une encyclopédie*, ed. by Jacques Lucan (Paris: Centre Georges Pompidou, 1987), and in Jean-Louis Cohen, *Le Corbusier and the Mystique of the USSR: Theories and Projects for Moscow*, 1928–1936 (Princeton, NJ: Princeton University Press, 1991). Bernard Tschumi refers to Ejzenštejn in several of his theoretical works, such as ‘Homage to Ejzenštejn’ (Joyce’s Garden Project, 1976–1977), ‘Screenplays’ (1976–1978), and later in his book *Architecture and Disjunction* (Cambridge, MA: MIT Press, 1996); for a comprehensive account of Tschumi’s links to Ejzenštejn, see Martino Stiërli, *Montage and the Metropolis: Architecture, Modernity and the Representation of Space* (New Haven, CT: Yale University Press, 2018), pp. 221–24. Manfredo Tafuri discusses Ejzenštejn’s cinematic theories in the chapter ‘The Historicity of the Avant-Garde: Piranesi and Ejzenštejn’ of his book *The Sphere and the Labyrinth: Avant-Gardes and Architecture from Piranesi to the 1970s* (Cambridge, MA: MIT Press, 1987), pp. 55–64; in the same book (pp. 65–90), Tafuri includes Ejzenštejn’s article ‘Piranesi, or the Fluidity of Forms’ in its entirety. Ejzenštejn’s influence on architecture is described in Anthony Vidler, ‘The Explosion of Space: Architecture and the Filmic Imaginary’, *Assemblage*, 21 (1993), 45–59; and, more recently, in Anthony Vidler, ‘The Ejzenštejn Effect: Architecture and Narrative Montage in Sergei Ejzenštejn and Le Corbusier’, in *The Moving Eye: Film, Television, Architecture, Visual Art and the Modern*, ed. by Edward Dimendberg (Oxford: Oxford University Press, 2019), pp. 57–76.

5. Stiërli, *Montage and the Metropolis*, p. 180.

6. Yve-Alan Bois, ‘Introduction’, in Ejzenštejn, ‘Montage and Architecture’, p. 115.

7. Luigi Moretti’s article was originally published in *Spazio*, 7 (December 1952–April 1953), 9–20, 107–08. It was later published in English as ‘Structures and Sequences of Spaces’, in *Luigi Moretti: Works and Writings*, ed. by Federico Bucci and Marco Mulazzani (New York, NY: Princeton Architectural Press, 2002), pp. 177–81.

8. ‘Montage and Architecture’ is one of the building blocks of Ejzenštejn’s book-length work *Montage*, written between 1937 and 1940. Parts of *Montage* have been published in English under the title ‘Montage 1938’, in *The Film Sense*, ed. by Jay Leyda (New York, NY: Harcourt Brace Jovanovich, 1942), and Sergei M. Ejzenštejn, *Notes of a Film Director* (New York, NY: Dover, 1958). A more comprehensive version of Ejzenštejn’s *Montage* is published in *Towards a Theory of Montage*, II, ed. by Glenny and Taylor.

9. In his introduction, Bois suggests that ‘Montage and Architecture’ should be read together with ‘El Greco y el cine’, another essay written by Ejzenštejn in the same period, as they are ‘two symmetrical facets of the vast inquiry that Ejzenštejn had begun during the late 1920s into montage and cinematography in the “other arts”’. See Bois, ‘Introduction’, pp. 111–12.

10. Auguste Choisy, *Histoire de l’architecture* (Paris: Gauthier-Villars, 1899).

11. Sergei Ejzenštejn, *Film Form: Essays in Film Theory*, ed. by Jay Leyda (San Diego, CA: Harcourt Brace Jovanovich, 1949).

12. Tafuri, *The Sphere and the Labyrinth*, p. 59.
13. Sergei Ejzenštejn, *Nonindifferent Nature*, ed. by Herbert Marshall (Cambridge: Cambridge University Press, 1987), p. 122.
14. Bois, ‘Introduction’, p. 114.
15. Sergei Ejzenštejn, *Immoral Memories: An Autobiography by Sergei M. Eisenstein*, ed. by Herbert Marshall (Boston, MA: Houghton Mifflin, 1983), pp. 181–83.
16. Bois, ‘Introduction’, pp. 113–14.
17. Vidler, ‘The Explosion of Space: Architecture and the Filmic Imaginary’, p. 55.
18. Philipp P. Fehl, ‘Hermeticism and Art: Emblem and Allegory in the Work of Bernini’, *Artibus et Historiae*, 7.14 (1986), 153–89.
19. In his article, Ejzenštejn reported and discussed six scholars that have published different theories about Bernini’s sculpture. See Ejzenštejn, ‘Montage and Architecture’, p. 122.
20. Ibid., p. 128.
21. Both Giuliana Bruno and Martino Stiërli provide a short interpretation of Ejzenštejn’s analysis of the baldachin, albeit in political, rather than architectural, terms; Bruno considers it from a gender perspective, while Stiërli focuses on censorship and related potentialities of intellectual montage. See Giuliana Bruno, *Atlas of Emotion: Journeys in Art, Architecture, and Film* (New York, NY: Verso, 2007), pp. 63–64; Stiërli, *Montage and the Metropolis*, pp. 198–201.
22. Bruno, *Atlas of Emotion*, p. 68.
23. Stiërli, *Montage and the Metropolis*, pp. 201–04.
24. Adrian Forty, *Words and Buildings: A Vocabulary on Modern Architecture* (London: Thames & Hudson, 2000). See especially the chapter on ‘Space’, pp. 256–75.
25. Johanna Gullberg, ‘Voids and Bodies: August Schmarsow, Bruno Zevi and Space as a Historiographical Theme’, *Journal of Art Historiography*, 14 (2016), pp. 1–20. (p. 3).
26. August Schmarsow, ‘The Essence of Architectural Creation’, in *Empathy, Form, and Space: Problems in German Aesthetics 1873–1893*, ed. by Harry Francis Mallgrave and Eleftherios Ikonomou (Santa Monica, CA: Getty Center, 1994), pp. 281–97 (p. 286).
27. Ejzenštejn, ‘Montage and Architecture’, p. 121.
28. The relationship between Luigi Moretti and Bruno Zevi has always been quite complicated. Both lived in Rome at the beginning of the twentieth century, sharing very similar visions about architecture. But, for ideological reasons, they were not close. See Roberto Dulio, “Il mio migliore nemico”: Moretti e Zevi’, in *Luigi Moretti: Architetto del Novecento*, ed. by Corrado Bozzoni, Daniela Fonti and Alessandra Muntoni (Rome: Gangemi, 2011), pp. 69–73.
29. Moretti, ‘Structures and Sequences of Spaces’, p. 178.
30. For the role and meaning of space in Moretti’s architectural theory, see Letizia Tedeschi, ‘Algoritmi spaziali: Gli artisti, la rivista Spazio e Luigi Moretti (1950–1953)’, in *Luigi Moretti: Razionalismo e trasgressività tra barocco e informale*, ed. by Bruno Reichlin and Letizia Tedeschi (Milan: Electa, 2010), pp. 137–77. The article analyses the seven issues of *Spazio* published by Moretti in the 1950s, and investigates the reasons behind the decision to literally name the magazine ‘space’.
31. Emil Kaufmann, *Three Revolutionary Architects, Boullée, Ledoux and Lequeu* (Philadelphia, PA: American Philosophical Society, 1952), p. 492.
32. Moretti, ‘Structures and Sequences of Spaces’, p. 178.
33. In ‘Structures and Sequences of Spaces’, Moretti specifically analyses two churches designed by Guarino Guarini: S. Filippo Neri (Casale Monferrato, Italy) and S. Maria della Divina Provvidenza (Lisbon, Portugal).
34. Moretti, ‘Structures and Sequences of Spaces’, p. 180.
35. Ibid.
36. Ibid., p. 181.
37. Ibid., p. 177.
38. Łukasz Stanek, ‘Architecture as Space, Again? Notes on the “Spatial Turn”’, *Le Journal Spéciale* Z, 4 (2012), 48–53 (p. 49).
39. Ejzenštejn, ‘Montage and Architecture’, p. 116 (my emphasis).
40. Despite this ‘visual’ common point, here Ejzenštejn distinguishes between a ‘cinematic path’ and an ‘architectural one’. The word ‘path’, introduced from the beginning and ‘not used by chance’, suggests the Russian director’s intention to explore the structural organisation of sequences as forms, or objects, defined by an ‘imaginary’ cinematic path or an architectural one. In this sense, and contra Vidler, Ejzenštejn proposes an idea of space that is not properly architectural, as it retains its strong ties with cinema’s spatial theories, and goes far beyond the barriers of both disciplines. See Vidler, ‘The Explosion of Space’, p. 56.
41. Moretti, ‘Structures and Sequences of Spaces’, p. 177.
42. Tedeschi, ‘Algoritmie spaziali’, p. 137.
43. Marie Seton, *Sergei Ejzenštejn: A Biography* (New York, NY: Grove, 1960).
44. Bois, ‘Introduction’, p. 115.
45. Referring in particular to the Acropolis, Ejzenštejn suggests to ‘look at it with the eye of a film-maker’. See Ejzenštejn, ‘Montage and Architecture’, p. 117.
46. Respectively, pp. 118–21 and 121–28 of the version of ‘Montage of Architecture’ published in *Assemblage*, 10 (1989).
47. Moretti, ‘Structures and Sequences of Spaces’, p. 178.
48. Annalisa Viati Navone, ‘The Architect Luigi Moretti: From Rationalism to Informalism’, *Kwartalnik Architektury i Urbanistyki*, 2 (2012), 31–41 (p. 36).
49. Tommaso Magnifico, ‘Luigi Moretti; l’idea di architettura’, *AR Magazine*, 121 (2019), p. 202.
50. Herman Melville, *Typee* (1846); Ewald André Dupont, *Variété* (1925) in ‘Structures and Sequences of Spaces’, pp. 180–81.
51. I have translated the quote from the original Italian, as cited in Tedeschi, ‘Algoritmie spaziali’, p. 148.
52. Carla Molinari, ‘In between the Arts: Peter Greenaway and Sergei Eisenstein’, *Quarterly Review of Film and Video*, 35.4 (2018), 333–48.
53. Sergei Ejzenštejn, ‘Montage of Attractions’, in Selected Works, Volume 1: *Writings 1922–1934*, ed. and trans. by Richard Taylor (London: British Film Institute, 1988).
54. Moretti, ‘Structures and Sequences of Spaces’, p. 180.
55. Adrian Sheppard, ‘The Return of Expressionism and the Architecture of Luigi Moretti’, in *Luigi Moretti: Razionalismo e trasgressività tra barocco e informale*, ed. by Bruno Reichlin and Letizia Tedeschi (Milan: Electa, 2010) <https://www.mcgill.ca/architecture/files/architecture/ExpressionismMoretti.pdf> [accessed 8 July 2021].
56. Ejzenštejn’s passion for drawing was effectively displayed in the recent exhibition ‘Unexpected Ejzenštejn’, held from 17 February to 30 April 2016 at the GRAD: Gallery for Russian Arts and Design in London.
57. Antonio Somaini, *Ejzenštejn: Il cinema, le arti, il montaggio* (Turin: Einaudi, 2011).
58. ‘Montage and Architecture’ was published posthumously; it is therefore more difficult to ascertain which images Ejzenštejn had considered as the visual apparatus of his words. In this article, the visual analysis has been conducted considering the version of the article published in *Towards a Theory of Montage*, II, ed. by Glenny and Taylor.
59. Steven Jacobs, ‘Eisenstein’s Piranesi and Cinematic Space’, in *Aspects of Piranesi: Essays on History, Criticism and Invention*, ed. by Dirk De Meyer, Bart Verschaffel and Pieter-Jan Cierkens (Ghent: A&S/books, 2016), pp. 142–59 (p. 149).
60. Bruno Zevi, *Architecture as Space: How to Look at Architecture* (New York, NY: Horizon, 1974).

61. Viati Navone, ‘The Architect Luigi Moretti’, p. 36.

62. Ejzenštejn, ‘Piranesi, or the Fluidity of Forms’, in Tafuri, *The Sphere and the Labyrinth*, p. 59. The article was published in English.

63. Luigi Moretti, ‘Form as Structure’, in Luigi Moretti: Works and Writings, ed. by Bucci and Mulazzani, pp. 182–84 (p. 182).

64. Bernard Tschumi, ‘Sequences’, *The Princeton Journal: Thematic Studies – Architecture*, 1 (1983), pp. 29–37 (p. 30).

65. Moretti, ‘Structures and Sequences of Spaces’, p. 178.

66. Ejzenštejn, ‘Montage and Architecture’, p. 117.

67. Stiërl, *Montage and the Metropolis*, p. 203.

68. Martino Stiërl, ‘Architecture and Visual Culture: Some Remarks on an Ongoing Debate’, *Journal of Visual Culture*, 15.3 (2016), 311–16.

69. Christopher Hight, Michael Hensel and Achim Menges, ‘En Route: Towards a Discourse on Heterogeneous Space beyond Modernist Space-Time and Post-Modernist Social Geography’, in *Space Reader: Heterogeneous Space in Architecture*, ed. by Michael Hensel, Christopher Hight and Achim Menges (Chichester: Wiley, 2009), pp. 9–38.