This article narrates the encounter of the author with Angelo Rudella, the head of the construction site at the Castelvecchio Museum, Verona, during the period of Carlo Scarpa’s renovation (1957–1964, 1965–1975). Rudella visited the site on July 11, 2019, to identify the original place of Scarpa’s site office — an office that Rudella shared with Scarpa for the duration of the 1960s – 70s renovation work, and until Scarpa’s death. As one of the last storytellers, to be able to offer a first source account of Scarpa’s design process at Castelvecchio, he operated a sited re-reading of architectural details, which he analysed in their present context. The visit began by identifying Scarpa’s site office and then walking throughout the Castelvecchio Museum so that recollections emerged on site through an instance of peripatetic storytelling. Relying on a historical mnemonic technique — the art of memory and storytelling — sited memories resurfaced along the museum path, triggering key recollections associated with the construction site and archival photographs. A few selected stories and details are presented, evidencing the role of Rudella as an essential collaborator.
How do stories fall into place? How do architectural elements find their proper order and meaningful assembly? The sequence of spaces explored by a visitor entering the Castelvecchio Museum in Verona, the order in which one remembers its rooms and atmosphere after having been there, and the order of the design of its details are different. I chose to start this story about Castelvecchio from the place where Carlo Scarpa (1906–1978) used to draw and where the 1960s renewal of the Museum began — his site-office.

On July 11, 2019, I met Angelo Rudella, one of Scarpa’s assistants, a surveyor and a technologist who shared the site office with him and directed the construction site at the Castelvecchio Museum, Verona. He came to spend time there, for a day, while I was researching the concept of “architectural conversion,” at the archive, in the context of historical sites where Scarpa had composed the relationship between historical memory — as a sited construct — and future design.

A few days earlier, I had asked architect Alba di Lieto, the curator of the Carlo Scarpa Archive at Castelvecchio, if there was anyone who could be consulted to identify the site of the original office of Scarpa at Castelvecchio to understand how he worked while on-site at the museum. Di Lieto wrote that Scarpa did not hold a professional office in a traditional sense, and he had set up a drafting room within the museum. However, the historical photographs and documents preserved in the archive did not quite allow me to recognize the space where Scarpa used to work. His close collaborator on this project, architect Arrigo Rudi (1929–2007), attested that Scarpa prepared most of the drawings for Castelvecchio on-site, “in the Castelvecchio offices, in an area temporarily set aside and fitted with a large drawing table.” But a few photographs show a possible office where he might have been working (ca. 1958–1959). There was no certainty as to whether this was the actual drafting room or a temporary space, and no clear trace was left behind in the archival documentation to conclude where he had set up his drafting room (figures 1, 2).

Scarpa began working at Castelvecchio in 1957 on the invitation of art historian Licisco Magagnato (1921–1987), the museum director. Scarpa’s work is exemplary of an in-between practice, which is neither architecture nor conservation per se; instead, it is a demonstration of architecture in conversion, where the threefold nature of time, weather and tempo is the prime storyteller. Informed by this triad, architecture in conversion is radically different from current conservation practices in the Western world in a heritage context.
the dominant imagination of endings (preservation) with an imagination of beginnings (design alterations) in a context of architectural renewal.

The word conversion is rooted in the Latin verb vertere, which means turning or flipping an object. Conversion entails a radical turn in how we see and understand something. It involves seeing something all around, both spatially and temporally. Similarly, from an architectural standpoint, merging material, sensory, and cultural conversions gives rise to a sited sensing of time — weaving the fabrics of time, weather, and tempo in architecture.
Scarpa's practice of conversion is more akin to “storytelling” than “historical materialism,” as defined by Walter Benjamin (1892–1940). Architectural stories are not the product of the accumulation of information, which produces an indexable material history to be preserved; instead, they come alive over time when passed on from one author to the next, but also from one author to their collaborators — architects, technologists, engineers, crafts people, construction workers.

A slow design process, such as the one enacted by Scarpa, was meant to afford in-depth understanding and observation of Castelvecchio and its deeply seated historical “factures.” As the building was being read as a time palimpsest, dating elements and materials, decisions were made about which elements to remove or alter. Often such choices were linked with a desire to clarify the historical transformations of the fabric in relation to different periods. Such a process often entailed a conversion of memory — exposing the fabrics of time and architecture through careful subtractions and a patient undoing. These operations, exposing hidden surfaces and materials, allowed a well-sited imagination to be developed, or what I would call an ‘imagination of the construction site’ — where cycles of making and unmaking allow for the weaving of the fabrics of memory with projective imagination. Un-making refers here to a process of undoing a doing sequence — exposing the construction and construing of sited-memories developed from one author to another, in a temporal sequence where often authors remain unknown. The notion of an ‘imagination of the construction site’ is further supported by the fact that Rudella explained that a unified and complete project for Castelvecchio never existed. Alba Di Lieto herself described Castelvecchio as a “permanent construction site.”

For Scarpa, who is one of the most recent but not the last author to intervene on the historic fabric of Castelvecchio, the process of drawing became a patient mirror of the discoveries happening in situ. Scarpa would observe workers on-site, taking note of their use of tools, how they exposed time-joints and connections when handling, altering, disassembling, or demolishing architectural elements, revealing the layering of different materials and periods. Certain undoings had to do with structural upgrades for safety purposes, others were motivated by the insertion of new building systems or the removal of historical fakes.

This process of re-imagining is radically different from a design approach where the work happens exclusively through the use of survey and design drawings as tools to imagine possible future transformations. For Scarpa, the process of drawing necessitated going back and forth from the building site to the drawing, and from the drawing to the site. His peripatetic wanderings from his drafting table to the construction site entailed periods of observations of the building fabric and the construction work as it was taking place. Indeed, the process of design happened through recurring cycles of drawing and construction.
In this process, reflective design ideas emerged, weaving together past and future details in disparate parts of the edifice.

Angelo Rudella is one of a few storytellers who can still narrate a first-source account, being a participant and witness to the renewal of the Castelvecchio Museum in Verona during Scarpa’s two design periods on this site (1957–1964, 1965–1975). In his role as technologist and collaborator of Scarpa, he realized most of the survey and executive drawings. He began his work there in 1959 as a contractor working for the Luigi Castellani construction company. The following year, Scarpa requested that he be working on-site full time for the museum, to follow the project’s execution closely. Rudella collaborated with and shared Scarpa’s site office until Scarpa died in 1978.

When Rudella and I walked through the galleries of Castelvecchio, everyday stories of the construction site began to emerge. He conveyed sited storytelling of architectural details, which he analysed in their present context. Each detail triggered personal memories and recollections of a conversation or an interaction between Scarpa and himself, but also with Magagnato, or other collaborators, like Rudi, who started to work with Scarpa in 1957, when he was still an architecture student at IUAV in Venice. The visit began by identifying Scarpa’s site office. Rudella took Alba di Lieto and me to the place where the office was located and where many conversations with Scarpa took place and was able to indicate the approximate position of Scarpa’s drafting table as well as his own (figure 3).


18 Rudella had not been back there since when he left work on the site after Scarpa’s death, and had not visited the Carlo Scarpa Archive, which also includes his drawings. Angelo Rudella in conversation with the author at Castelvecchio, 11 July, 2019.
As Rudella explained, Scarpa did not use an adjustable drafting table like his own and preferred instead a provisional working desk formed by a wooden board standing on two-legged trestles (figure 1). Their close collaboration grew over the years, and Rudella often felt that he could complete Scarpa’s drawn thoughts when he needed to prepare the construction drawings in a manner that was in keeping with the integrity of the design idea. Indeed, as Murphy explained, “the vast majority of his [Scarpa’s] sketches were worked up by Rudella into rather normal workman-like drawings.”

Until 1962 Scarpa lived in Venice and taught at IUAV and would spend time at Castelvecchio every week, arriving on-site on Thursday or Friday evening, at about 7.00 pm. Often he would stay on-site to work till midnight or even later. Rudella explained that the phone was the only means of communication when Scarpa was in Venice. However, they would rarely call each other unless something urgent came up, and most of the communication happened during Scarpa’s site visits. The gap between drawings and building was filled by conversations and side annotations on Scarpa’s nocturne drawings. Rudella attested how he would often sit next to Scarpa while he drew, and many conversations took place. Others like Rudella and Magagnato would participate too. The act of drawing is, in this sense, an ongoing conversation taking place on the construction site. Sometimes, when Rudella and Scarpa could not meet, the design ideas were relayed by Magagnato or Rudi, who could also join the office during the weekend. They would support the reading of drawings and intentions to actualize the project.

During the weekend, Scarpa used to arrive at his site office in the late morning, unless he spent time in Verona visiting other sites, in which case he would arrive later. Often Rudella, and the construction workers, would join him in long work sessions that sometimes lasted into the late night. Rudella recalled how in 1963–1964, before the opening of the museum, Scarpa worked intensely to find the right places for the sculptures on the main floor. This work took place after sunset to study dramatic chiaroscuro effects with the use of temporary construction site lighting to appreciate contrasting light and shadow effects and the unique qualities of the sculptures and the ambiance (figure 4). This technique was analogous to those used in an artist’s workshop to simulate natural daylight effects. The statues were placed on supports with wooden rollers, which facilitated moving the delicate and weighty sculptures to find the most suitable location. Rudella’s recollection confirms something that Marco Frascari (1945–2013) wrote in 1982:

Scarpa made a practice of visiting the building site during the night for verification with a flashlight, thereby controlling the execution and the expression of the details. In the normal daylight it would indeed be impossible to focus on details...
As Frascari further noted, this was a customary practice followed by architect and artist Giovanni Battista Piranesi (1720–1778), who practiced in the Veneto area. Scarpa’s habit of drawing in the evenings at the site office allowed him to slowly bring to life nocturnal drawings that Rudella would consult during the week to continue working in the absence of Scarpa. Scarpa was well-known for extending the design process and for his constant thinking and re-thinking of details and ideas. Indeed he allowed for events, accidents and discoveries to find their way into the project.
To this end, his tendency to delay the conclusion of a design process was a productive tactic.

Based on the drawings that Scarpa would work on during the weekend, Rudella would be able to continue preparing the construction drawings and supervise the work of six or seven workers in between Scarpa’s visits. Scarpa’s design thinking followed a unique process consisting of designing different areas at the same time. For example, while working on design elements on the main floor of the sculpture gallery, he was also thinking about the upper picture gallery and the roof level. Magagnato explained Scarpa’s working method based on overlaying multiple drawings simultaneously on tracing paper. The sequence of design elements was such that it did not follow a spatial order, and he could easily move from one area of the castle to another, one week after the next.

Scarpa nevertheless produced a unified but conceptually unfinished project, placing attention on disparate details and their connections. The order of the design indeed does not match the order in which visitors enter the museum and follow the itinerary devised for them, where one enters from the sculpture gallery and, following a carefully coordinated path through the museum, is brought back to the beginning, exiting from the same entrance threshold from which their journey started. The ‘scattered details’ in Scarpa’s work are time-joints revealing their make and the period of their making — each being designed at their own time in a non-linear order.

The imagination of conversion develops through the ‘imagination of the construction site.’ Scarpa’s design ideas evolved as real-time responses to discoveries made in situ during the phases of investigation and preparation of the construction site, when coming into contact with historical materials and details, probing into and altering the building site, and detailing the converse and reciprocal qualities of past and future architecture. This design process blurs the line between where the drawings stop, and the construction site begins. Drawings and building exist in continuity and contiguity, weaving the fabrics of time through a back and forth of drawn and built reflections. It is very appropriate that having seen the drawings being produced in situ, Magagnato decided to purchase them, giving them a permanent home and thus conceiving them as part of the site itself. He created the opportunity for another kind of memory where the dialogue between drawings and building can be sustained in a deeper dimension of time, past the period of the author’s presence on the site — amplifying their relationship in a way that allows them to denote one another, which means that the drawings contain the building or its details, and the building houses the drawings, and they could be experienced simultaneously on the same site.

Scarpa’s annotated drawings were essential to communicate with his collaborators; however, he would also spend considerable time on the construction site talking with the workers, his design collaborators,
and the museum director. It is documented how he even drew on the walls of the construction site.\textsuperscript{32} These moments of creative conversations built a collaborative spirit, so much so that his assistants and the construction workers would remain on site late into the night when Scarpa was there.\textsuperscript{33} The work of the Venetian master embodies a process of sited imagination, where careful readings of the construction site during the day and night triggered endless design ideas and details. Observing the photographs documenting the construction site, which were taken for the most part by Rudella himself and Andrea Pagliarini,\textsuperscript{34} it appears that even building disassembly was a source of inspiration for the design (figure 5).

The existing monolithic slabs of prun stone in the sculpture gallery, placed below the arched thresholds between rooms, were lifted to create a space beneath the floor to insert the new heating systems. This phase of the work documented in photographs became an inspiration for Scarpa (figure 5). An everyday action on the job site, such as lifting a stone by rotating it and thus exposing its underside, revealed an architectural element’s \textit{recto/verso} condition. The \textit{recto} is a polished surface on which to walk, while the \textit{verso} is an irregular surface creating a stable setting for the stone when laid down. This moment of dislodgement \textit{in-between} two temporal conditions — \textit{before} and \textit{after} a construction process — turned into a serendipitous discovery of the hidden side of a story. Scarpa decides to fully expose the invisible side by rotating the prun stone further up at 90 degrees, thus placing it vertically against the wall.

The raising of the stone is a conversion that could be seen as a metamorphic rebirth of an element, renewing our capacity to see and participate in the narration of history.\textsuperscript{35} The floor slab is converted into a wall-facing element whose irregularly pitched surface evokes the memory of its being extracted from the quarry in Fane, Verona. Revealing the layers of thinking and making allows to \textit{feel} the passage of time. Rubbing against the prun stone — exposing the \textit{verso} side of a material and a story — the temporal disjunction from a historical condition is set in place and made palpable.

As Rudella recalled during our encounter, the collaborative and gratifying relationship between Scarpa and the construction site workers was such that once the rules of the game were established, there was room for play within given tasks; thus, the workers would be able to progress with the work during the week, while Scarpa was off-site. Given the unpredictable nature of a historical site, certain decisions had to be made while executing the work. Rudella could complete a detail or solution after verifying its realization and confirming its execution with Scarpa. Scarpa also found inspiration in workmanship, craft and the use of construction site tools.

Scarpa was adamant that it was necessary to understand every stage in the process of material transformation and was keen to learn from the advice of experts, like when he took a trip to Fane with Rudella to see how the prun stone was cut on-site at the quarry. The marble
fig. 5 Castelvecchio Museum, unknown author, 1958 (23.8 x 18 cm). View of the ground floor of the construction site during the first cleaning of the 1920s Avenian exhibition area with the removal of old plaster, false stucco, fireplaces, and false frescoes in the Renaissance or Baroque style. The monolithic floor slabs of prun stone are lifted to create space underneath to insert the new heating systems. Archivio Museo di Castelvecchio, CS007024/amc/001/016. © Castelvecchio Museum. Regione Veneto.

[opposite page]
Masons explained to them the process of cutting the material with a very long steel thread with the aid of sand and water, and also noted that when the stone is cut too thin (circa 4–5 cm), it can easily break due to the freezing temperatures that can be reached in the region. Scarpa was attentive to such details and made sure to have elements of the proper thickness. He observed at the quarry how the steel thread that was used to cut the stone would leave regular circular markings and wanted this hallmark of the cutting process to be visible in the exposed face of the stones used in the courtyard path leading to the main entrance of the museum. As we walked outside the museum and into the courtyard (figure 6), Rudella invited us to look at this surface detail as he was telling the story. He noted how the stone was worn by use, and the marks were only faintly visible, slowly eliding just like memories do. In a drawing of the courtyard co-authored by Rudella and Scarpa, Scarpa annotates the words Prun Rosso Rovescio. He intended for the red prun stone to be laid
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upside down to reveal the side with the steel markings, a side that normally would be hidden (figure 6).

The conversion of ideas and processes from one material to another allowed the design of unique details. The parallel line markings inscribed in the striped concrete of the floor of the sculpture gallery were inspired by the markings made by the steel thread on the prun stone.36 The workers traced the concrete stripes with a special tool while the cement was setting (figure 7). The bands of prun stone alternating with the striped concrete sections were to be about 3 millimetres higher than the concrete floor surface, so that by walking over it the stone would be felt underneath one’s feet, acting as a slowing device for a visitor. However, the prun stone bands were also a cunning device used to limit the surface area of the daily work. In fact, each concrete floor section in between bands of prun stones corresponded to a single day of work. One could say that the floor pattern alternating striped concrete and stone bands had an ethical function in

36 Di Lieto, I Disegni di Carlo Scarpa per Castelvecchio, 60.

fig. 7 Angelo Rudella with Federica Goffi, discussing the method for carrying out the concrete floor in the sculpture gallery of the Castelvecchio Museum (11 July, 2019). © Prakash Patel.

setting and limiting the amount of work to be accomplished in a day. Notably, the concrete line markings in the interior are still visible to this day and lasted longer than the prun stone markings in the courtyard of the museum.

**Conclusions: The Art of Memory**

As Marco Frascari noted, Scarpa never wrote down his theories of architecture. According to architect Guido Pietropoli, one of his former collaborators, there was a concern on the part of Scarpa that his thinking through design may not be fully understood, and it would be best for the work to speak for itself. Indeed, Scarpa’s Iuav manifesto — *VERUM IPSUM FACTUM* — suggests the necessity of a full-scale engagement from one made fact to the next. Giambattista Vico (1668–1744) stated that “For the Latins, *verum* (the true) and *factum* (the made) are interchangeable, […], they are convertible.” These words, enduringly inscribed into the Istrian stone gated entrance of the architecture school in Venice following a design by Carlo Scarpa, are a solid reminder that every human construct is a demonstration of its having been made.

My approach to reconstructing this history is to invite Scarpa’s collaborators to meet me in situ. During several meetings, I had over the past five years (July 2015–July 2019) with architects Sergio Los, Guido Pietropoli, Franca Semi (1943–2019), technologist Angelo Rudella, as well as craftspeople, such as Paolo and Francesco Zanon (two brothers with whom Scarpa worked) the close relations and the lasting commitment to his legacy emerged, as did their collaborative work in the decades past Scarpa’s death. In this way, instances of peripatetic storytelling emerge on site. Relying on a historical mnemonic technique — the art of memory — sited memories resurfaced along the museum path, triggering key recollections associated with the construction site and archival photographs in a process of active in situ storytelling. The walk through the gallery with Angelo Rudella on July 11, 2019, which begun in Scarpa’s newly found former office space (figure 3, 8), revealed that each detail is linked to a personal memory of conversations and interactions between close collaborators.

The majority of publications acknowledge Scarpa’s genius as an author intervening in a historical context. However, his role as curator of the collaborative cultural enterprise in the construction of architecture that occurs within the transhistorical dimension of cycles of architecture-in-conversion is yet to be acknowledged. The collaborative aspects of architecture-in-conversion are enhanced by the conversations and design dialogue that took and take place at a distance in relation to authors of other periods when considering possible alterations and additions. Scarpa’s annotated drawings are the results and the witnesses of valued conversations which enabled a collaborative process to unfold.
The conversion-gap between drawing and building, like the one between score and music, defines a shared tempo open to the imagination of the construction site. It is often acknowledged that the ubiquity of drawings distanced the architect from the construction site. Yet, in Scarpa’s case, this temporary separation was filled by side annotations transforming his drawings into tools of communication that liberated the imagination of his collaborators who felt their role as that of active participants in the collective construction of details and culture. The “gap” between drawing and building is a vital element in architecture that needs to be preserved as a shared listening space that allows for the development of collective imagination.44 French philosopher Jean-Luc Nancy stated that “communication is not transmission, but a sharing that becomes subject: sharing as subject of all ‘subjects’.”45 The gaps in Scarpa’s details and his drawings are the result of uttered conversations and the interpretation of his drawings and annotations by the hands and eyes of others. While a drawing may be autographic, allographic architecture results from multiple authorship and a collaborative construction and construing.

Scarpa’s details reveal the labyrinthine fabric of culture woven through collaborative building acts throughout the operations of the construction site. A reading of historic photographs of the construction

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site, contrasted with contemporary ones, reveals how details were imagined in synchronism with the activation of the site, rather than conceived a priori, constructing building sections through time rather than through pre-conceived drawings. In this sense, Scarpa’s drawings are immersed in a slow-tempo parallel to the building site’s alterations.

During the development of projects, Scarpa kept up close relations with collaborators and craftspeople. Collaborators were compelled by their reciprocal commitment to their shared enterprise and an ethical responsibility to continue the incomplete works and sustain the sites of knowledge construction after Scarpa’s sudden death. This was mainly possible due to the fully collaborative and participatory design process that Scarpa followed with trusted advisors, collaborators, craftspeople and construction site workers.

Conversely, today responsibilities are timed by deadlines, and drawings are held as contractual records of the work for the duration of a liability period. In contrast, an architect of record, past the time of construction, is seldom in place. Drawing details is not only a matter of scale but of committing to the process of construction of ‘made facts’ through drawing, material selection, and realization, even beyond completion. In Scarpa’s details, every material states its role in constructing the joint — factually, inviting curiosity and pensiveness. Today, it is seldom the case that we leave behind details that are legible built-facts. Instead, the deeds of construction are hidden, and the proof of making can be let go when the legal responsibility to keep a record is foregone, which may explain the lack of interest in the present professional world to guarantee access to drawings on-site past the time of active imagining and construction.46

Tellingly, Angelo Rudella’s last name was the source of a playful exchange with Scarpa. Scarpa used to affectionately call him, “Rudella, rodella, roda.” Roda in Venetian dialect signifies a wheel. Not only was Scarpa fascinated by the power of conversion (Lat. vertere, to turn), but Rudella was his trusted collaborator, always present at the Castelvecchio construction site, looking after the carefully choreographed movement of architectural elements throughout the 1960s and 70s transformations of the site.