

From intangible to tangible.

Artisan Skills and Traditional Crafts for Preserving Venice's Built Heritage

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Topic: T3.1. Intangible heritage: the management of know-how and local construction culture

Abstract

Venice can be regarded as a test bed for any preservation strategy. From its very origins, the city has always had to withstand hostile environmental conditions, such as unstable soil, overflowing tides, and rising damp. Hence traditional materials and techniques are the result of a thousand-year-old selection aimed at improving their durability.

Since the end of the nineteenth century, however, historical surfaces have been progressively replaced by new short-lasting plasters, following the trend of systematic refurbishment meant to maximize economic output with disregard for good practices. As tourism became the driving force of a social, cultural, and architectural transformation, a sharp decrease in local population and craftsmanship has caused the loss of traditional know-how, leading to irreversible decline and low-quality interventions.

All this makes it necessary to reconsider the use of traditional materials and building skills, trusting, once again, in the Venetian craftsmen who are the repositories of local material culture and in the intangible know-how that can be crucial in protecting the city's tangible built heritage.

Joint efforts between the Iuav and local craftsmen are now underway in this regard. This synergy is making it possible to readdress an operational approach in which preservation is understood as the broadest possible care-for practice capable of providing continuous maintenance and control over architectural variations. Urgent too is the need to transfer traditional know-how from the elder custodians to the younger generations who will have the cultural and operational task of safeguarding Venice's future. Finally, fostering traditional good practices may also help develop local, cost-effective, site-specific efforts capable of promoting positive economic-and-social reversion.

Reintroducing traditional high-quality materials and artisan skills, together with controlled, compatible innovation, should be regarded as a sort of living idea of tradition, connecting past and future in protecting Venice's material authenticity – its main tangible resource and a specific requisite for a UNESCO World Heritage Site.

Keywords: Venice, preservation, tradition, craftsmanship

1. Introduction

In 2000 the Venetian historian Ennio Concina quoted his fifteenth-century predecessor Marcantonio Coccio Sabellico to depict the most iconic image of Venice, a city “suspended between two elements,” highlighting instability as

an endemic trait of its character (M. Antonii Sabellici, *Historiae Rerum Venetarum ab urbe condita*, 1556 in Concina 2000). This image encapsulates the fragility of Venice, a city constantly threatened by water (Gasparoli and Trovò 2014), and, at the same time, its ability to last,

thanks to human efforts to gain soil and to make buildings withstand the unstable ground.

While the city's structures have had to be flexible enough to accommodate the ground's slow but continuous movements (Doglioni, Mirabella 2011), its architecture has actually been continuously reshaped, stratifying layers, reusing materials, and adapting elements to meet formal trends and functional needs as well as an unceasing process of physical decay.

Rather than expanding or imposing drastic renewal, the city center has grown upon itself. It can properly be regarded as a stratified architectural *palimpsest*, embodying the endurance of its diachronic development in the *longue durée* and recalling its resilience, which is deeply embedded in the consistency and durability of its constitutive matter.

These two aspects shed light on the role historical materials and surfaces still play in the city's long-established image and underscore the significance of their preservation (fig.1).

1.1. The “matter” of Venice: between past and future

Venice is the destination of a worldwide tourism attracted by its major monuments and palazzi, which – blending Roman, Byzantine, Islamic, and Northern features – reflect the city's historic role as a cultural melting pot. Yet, while the unique shapes of the city's east-west architecture are distinctively known, the materials of its construction deserve further attention.

Equally significant to the precious marbles covering the city's facades and pavements are the stones Ruskin so thoroughly explored, the simpler plasters, and the medieval painted brickwork (Piana & Danzi 2004; Squassina 2011). They provide polished surfaces and refined textures that contribute to strongly defining the character of the building or masonry of which they are a part (fig.2). These historical surfaces bear the stratified marks of centuries of natural and human alterations. They are a tangible ‘stone book’

that make a single building a living material document and the documentary evidence of multiplicity throughout time.



Fig. 1. Venice, Palazzo Moro: view of the inner court. The architectural features are emphasized by the medieval *regalzier* (false brickwork plaster), which is still well preserved (Source: Squassina, 2007)

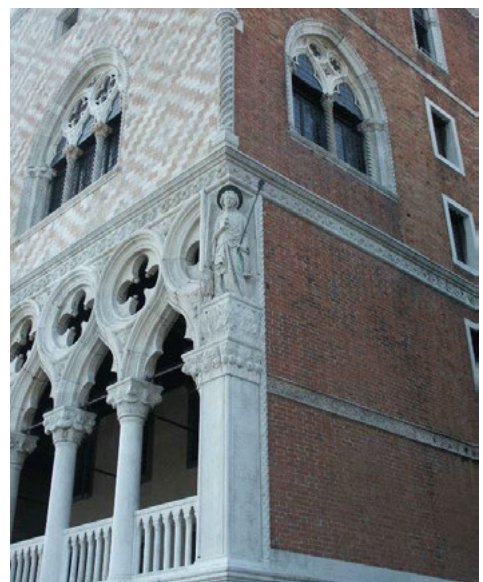


Fig. 2. Venice, Palazzo Ducale: the ‘noble’ stone and the ‘humble’ brickwork, the two main material components of Venice's architecture (Source: Squassina, 2010)

As a whole, these building features and stratified signs are crucial factors in the authenticity of Venice itself, which lies, for the most part, in its tangible substance. At the same time, historical masonries and coatings have shown long-term resistance to the demanding natural conditions, granting the built heritage undeniable durability.

Venice owes its peculiar historical surfaces to a centuries-long selection of materials and to the refined processing and finish techniques whose performance has been constantly improved over time. Experience has taught its resident artisans how to make materials comply with the overwhelming environmental stress (fig.3).



Fig. 3. Venice, Calle de le oche: detail of the gothic brickwork and a later *cocciopesto* plaster that have been bearing the effects of moisture and rising damp for centuries (Source: Squassina, 2012)

Conversely, Venice has undergone increasingly rapid urban and architectural change since the late nineteenth century. New housing developments have been designed on the basis of modern criteria, introducing new materials, such as Portland cement, which had been foreign to local building practice. Though some technical experimentation has been conducted in the name of efficiency, especially to contrast rising damp (Squassina, 2016), few of these efforts have been worth the break with the traditional balance, given its long step-by-step adaptation and technical evolution.

Recent plasters and brickwork cause irreversible alterations to the facades (fig.4), often pauperizing the image of the whole city. In comparison to

the centuries-old, still surviving surfaces, their duration is limited due to their chemical and physical incompatibility with the existing masonries.

This makes a care-for approach particularly appropriate to Venice's built heritage. It would make it possible to maintain and possibly repair the existing masonries and plasters instead of resorting to systematic surface replacements. Yet, even if the effort required to maintain Venetian architecture with traditional materials would be a significant step forward, it alone might not be enough; the techniques employed are equally crucial to the final results.

The *intangible* know-how of local building practice can be a determining factor for the preservation of the *tangible* built heritage. This explains the importance of fostering local artisans, who are the repositories of the traditional skills now at risk of being lost forever due to economic pressure and insufficient turnover. These factors have left fewer and fewer craftsmen available for maintenance and preservation work.



Fig. 4. Detail of medieval brickwork with well-polished lime-and-sand repointed joints (on the right) and a modern addition with a Portland cement mortar joint (left) highlighting the loss of traditional building skills (Source: Squassina, 2021)

2. Preserving artisan skills to preserve Venice's historical surfaces

In addition to the loss of traditional craftsmanship, the use of cement instead of lime-based plasters is a rather common problem that has been experienced for decades throughout the modern western world. In many countries, the massive long-term problems of old masonries

have already urged the reintroduction of traditional materials. Besides the United Kingdom, where the preservation of traditional building skills has been deeply rooted since the establishment of SPAB and continues to develop (Williams, 2002), more recent efforts are also underway in Spain (Mileto & Vegas 2008) and in Italy (Lamioni, 2021).

Some active associations, such as the Italian Building Limes Forum are providing knowledge and technical support for research and practical workshops. Institutions are also officially recognizing the artistic and economic role of artisans in documents, such as the “The International Charter of Artistic Craftsmanship”¹ and in specific legislation defining the different branches of the artistic and traditional crafts². The focus on Venice is due to the large number of historic buildings in the city center and to the cost of working there, which dissuades local artisans from continuing their maintenance and conservation work (Vettore, 2019). Despite the heritage offices’ efforts to broaden the domain they safeguard, a large part of the built heritage is still not protected and is constantly exposed to the risk of irreversible renewal (fig.5). Some research has been done to avoid the loss of traditional skills (Piana, 2003 and 2007) and, recently, some joint projects have been developed by the University Iuav of Venice, the municipal heritage office, the Venice UNESCO office, and Confartigianato (the artisan’s association). This collaboration has led to a knowledge protocol (regarding the main materials and construction elements of Venice’s historical buildings), to criteria and examples of intervention, connecting theoretical principles and practice (Doglioni et al. 2017).



Fig. 5. New thick plasters cannot withstand the effect of rising damp for long in Venice: the above example is less than a decade old (Source: Squassina, 2021)

Expanding upon previous experiences and on a recent regional law promoting the ‘safeguard, development and promotion of craftsmanship in Veneto’³ (Paladini & Wacogne, 2021), further research is currently underway⁴. Conceived as a joint initiative between the University Iuav of Venice and local craftsmen, it seeks to bring the use of traditional materials and techniques to the fore as a possible strategy for preserving Venice’s heritage and cultural landscape (Squassina, 2021).

2.1. Bridging academic theory and traditional construction wisdom

The synergy between the Iuav and local craftsmen strives to readdress an operational approach in which preservation is understood as the broadest possible care-for practice, capable of providing continuous maintenance and controlling architectural variances while inspiring controlled and compatible innovation.

Venetian artisans are the true repositories of traditional skills, and their direct involvement in academic work can play both an operational and a cultural role. A brief description of some of joint projects currently underway follows.

¹ Carta Internazionale dell’Artigianato Artistico, Firenze, 26-04-2010 (CNA, Confartigianato imprese, Ateliers d’Art de France, Prefettura di Kyoto). The different branches are defined following the European Classification of Economic Activities (NACE rev.2), including ‘building decoration’ (point III) and ‘restoration’ (point XII).

² Decreto del Presidente della Repubblica n. 288 del 25 maggio del 2001.

³ Legge Regionale 08 ottobre 2018, n. 34: Norme per la tutela, lo sviluppo e la promozione dell’artigianato veneto.

⁴ Angela Squassina, “Strategie per la conoscenza e la valorizzazione dei beni architettonici e paesaggistici”, Università Iuav di Venezia-IR.IDE (Infrastruttura di Ricerca-Integral Design Environment, rep.1603/2019, prot. 61908, tit.7, cl.2).

- Artisans and research.

Involving local craftsmen in Iuav research aimed at contrasting physical decay and rising damp is one way to properly exploit their expertise⁵. In these experiments, different samples of traditional and modern materials, including variants of components, additives, and instruments can be tested and their behavior compared over time (fig.6). The technical and operational contribution of skilled consultants can help scientific supervisors direct and possibly even refine the research. Theorists can focus on reaching cultural goals, following a correct interpretation of the tests results, and relying on experts who are able to readjust recipes and means accordingly.



Fig. 6. Detail of a research experiment undertaken in collaboration between the Iuav, the Scuola Edile Padova, and a Venetian artisan to make and test the performances of traditional plaster and brickwork samples (Source: Squassina, 2021)

- Artisans and education

Taking care of Venice in its entirety means addressing sensibility toward both monuments and simple artifacts – a goal that requires education. Undergraduate and postgraduate university students have begun to be introduced to local material culture through workshops held in collaboration with the Confartigianato. One, held in 2019, offered an opportunity to exchange information and knowledge between the university

and the operational world of the craftsmen, restorers, and manufacturers. The primary goal was the intergenerational transmission of knowledge that could help preserve and maintain the ancient masonries of Venice through practical experience.

The learning goals of the WP “Construction wisdom: between past and future, for the preservation of the historic brickwork in Venice”⁶ were as follows:

a – offering university classes to provide students the main instruments and theoretical knowledge to recognize and describe the characteristics of the historical brick masonries in Venice, their physical decay and preservation issues.

b – introducing students to local artisan builders and manufacturers by allowing them visit their workshops to gather documents and testimonies about traditional manufacturing-construction activities in Venice (through interviews, videos, pictures, fig.7).

c – providing students an opportunity for on-site hands-on instruction during the reconstruction of an old collapsed wall, guided by a skilled restorer who explained each phase of the intervention.



Fig.7. Some Iuav students illustrating the result of their experience in an artisan workshop in 2019 (Source: Squassina, 2019).

⁵ For example, a Iuav-Ca’ Foscari-Co.Ri.La interdisciplinary study is now underway, monitoring Venetian masonries that are subject to deterioration from rising damp and testing samples with the help of local artisans (Venice 2021- WP 5.3.2, scientific supervisors, Professors Antonelli, Faccio, Peron, Saetta, and Zendri).

⁶ Scientific supervisor A. Squassina, with Confartigianato and 1st Framework London, a charity dealing with intergenerational exchange.

Another workshop, held in March 2022, allowed students from different schools (Scuola Edile Padova and the Iuav post-graduate school in architectural and landscape heritage) to make practical samples with traditional building practices and plasters under the supervision of local and foreign skilled craftsmen.

These experiences are hopefully the first in a longer collaborative effort that will encourage 'passing the baton' from the craftsmen to the younger generation.

- International seminars promoting the exchange of heritage experience and artisan preservation skills.

The author has taken part in several international seminars and organized study days aimed at exchanging experiences and building connections between the university and local artisans. Broadening this discussion to other countries is a productive way of revamping building tradition and inspiring technical and compatible innovation.

Some significant recent testimonies from the United Kingdom and the Czech Republic have provided the opportunity for a fruitful reciprocal reflection on the operational and cultural contribution of artisans and trained voluntary workers, the latter being an almost unexplored field in Italy⁷.

Other exchanges have revealed the major effort underway in Spain to enhance traditional materials and artisan skills, both for the preservation of the built heritage and to keep the material culture of entire non-urban districts alive, reinforcing the work of local artisans (fig.8).

Particular attention has also been given to developing compatible innovative design in the field of archaeological heritage and historical routes, aimed at protecting these places as cultural landscapes (Alvarez Alvarez and De la Iglesia Santa Maria, 2017).

In the end, broad-based exchange can help identify the proper ways to keep traditional know-how alive and to transfer it from the elder custodians to the younger generations, who have the practical – and ethical – role of ensuring Venice's future maintenance.



Fig.8. Sesga (Valencia): view of a traditional wash-house with a carefully preserved drinking trough, along with most of the village's vernacular architecture (Source: Squassina, 2021)

- Passing artisan skills on from past to future:

The synergy between the university and artisans aims, on the one hand, at preserving material authenticity in Venice, which is the prerequisite of any architectural and cultural or even tourist interest. On the other, it also intends to facilitate the transmission of technical knowledge and traditional skills from the craftsmen to the next generation, to hand on the responsibility of preserving Venice in the future.

Achieving such an ambitious goal cannot rely on episodic – albeit significant – efforts, and collaborative efforts are paramount.

Another step in this strategy is a training agreement between the Iuav and Confartigianato that will allow university students to visit artisan workshops and to work there for a while as assistants. This will make it possible for architecture students to gain expertise directly from expert craftsmen and to begin their profession

Heritage, founded in 2007 to help draw attention to this rich inheritance and to promote its repair.

⁷ In 2021 a collaboration was launched between the author and some SPAB volunteers and groups helping institutions carry out heritage preservation through *working parties* in the UK and the Czech Republic, such as the *Friends of Czech*

in close contact with the *matter* of architecture. Other interesting opportunities could be provided through grants enabling young graduates to get started in a traditional craft.

In the end, fostering local building and manufacturing activities could also help in developing a site-specific, cost-effective operational approach that could have a positive economic-and-social impact outside the academic world and on the younger generations of artisan workers.

This approach requires strong multi-level interaction. It is not about going ‘backwards’ but of reintroducing traditional high quality materials and techniques, alongside controlled compatible innovation as a living idea of tradition.



Fig.9. Venice, St. Mark's Basilica: "bricklayers," from the crafts sculpture cycle (thirteenth century), third arch of the main entrance. This was the icon of the Iuav study days *On The Surface* held in March (Source: Squassina, 2022)

3. From intangible to tangible and back, for the material authenticity of Venice

Donatella Fiorani has noted how the notion of heritage has shifted from the idea of “a material testimony of civilization” (Commissione Franceschini⁸) to the concept of “intangible heritage,” as stated by the Icomos Australia Burra Charter in 1979, later ratified by UNESCO in 2003 (Fiorani 2014). If, on the one hand, this sort of “de-materialization” broadened the notion of heritage under protection, it has, on the other, weakened the connection with *matter* ever since.

This reflection sheds light on the crucial role of *matter* in the field of built heritage. The *matter* of architecture is not only a physical support; it is the expressive substance that stores aesthetic and technical information as well as memory. Historical surfaces record both the signs of construction and the marks of transformation over time, inextricably connecting tangible to intangible within the idea of the artifact as a material product of human activity or even the whole of human life.

Preserving local artisan practice is meant, first and foremost, to ease the protection of Venice's built heritage. Yet it also aims at reinforcing the human, economic, and social context related to the city's *material culture*.

The relationship between historical artifacts and the traditional skills that produced them underpins the cultural identity of a place, as humble as it may be, making it a cultural landscape. Venice cannot elude this criterion in bearing the burden of its worldwide fame. If the city's palazzi are jewels of art and history, the humbler building fabric embodies its technical know-how and cultural memory. Together they form an indissoluble whole.

⁸ Legge n.310/26-04-1964.

This approach requires rethinking the concept of *palimpsest* in Venice. It regards not only a formal reference but also the more significant material context connoting the buildings, recording the marks of human and natural interaction that are, in themselves, worth preservation.

Riegl's *Alteswert* can act as a proper general criterion, whereby the contemporary idea of heritage would match a *development* value, which is connected to the time of nature, giving buildings an organic evolution and allowing them to constantly change their cultural meaning.

Assuming time as a peculiar dimension of architecture – and thus as a living material document – the contemporary attitude shifts from a synchronous appreciation of accomplished forms toward a diachronic reading of the stratified matter. Architectural stratigraphy becomes a highly effective tool in capturing the traces of a building's passing throughout time. Venice would definitely benefit from a similar diachronic approach to its architecture.

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